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A SYMPOSIUM ON APPRECIATION

FOREWORD

By JOHN R. WILDMAN

THE COMMITTEE ON RESEARCH of the American Association of University Instructors in Accounting has assembled certain material on the subject of appreciation for review by the membership at large. Thus, an opportunity will be afforded for criticism, and for the expression of any opinion which any one may have to offer.

Appreciation, because of conflicting theories and opinions held by various parties at interest, presents one of the most trying problems with which business men, lawyers, and accountants have to deal. Much of the difficulty probably results from the failure to make a thorough study of the subject from all its angles.

Certain graduate students at the University of Illinois, under the direction of Professor A. C. Littleton, have prepared a report on a survey made by them on the subject of appreciation. This material appears hereinafter immediately under the main headings and is followed in each instance by the comments of certain members of the association. The committee is greatly indebted to them for the use of this material.

Using the information published herewith as a basis, the Committee on Research hopes to gather sufficient data to make possible a comprehensive and impartial consideration of the whole subject. Further, it is hoped that it may be possible to formulate a statement of conclusions which may be reported to the Association, adopted, and promulgated for the benefit of those who are interested, but do not have the time to make the investigation necessary for a complete grasp of the subject.

WHAT IS APPRECIATION?

In seeking a definition of appreciation, an extensive search through our accounting literature fails to yield a very rich return. The fundamental idea of an increase in values is, of course, always present. Among the terms used to express this thought are: accumulating value, accretion of value, enhancement of value, rise in value, etc. These phrases classify into two groups, those which merely suggest a change of state, such as "increase", "rise", "enhancement", and the others, like "accretion" and "accumulating", which definitely suggest a long-time progression. But there is no agreement upon the terms which best explain "appreciation".

In the definitions surveyed, various statements were made to indicate why the changes in value which we call "appreciation" took place. There is the simple but rather vague statement, for example, that "It is due to the passage of time." But this merely assumes the reality of appreciation without telling what it is. In some cases, the influence of *changing demand* is emphasized. Where property is in demand,

appreciation may occur in other nearby property."[1] Still others point more directly to *prices or costs* as the leading explanation. "Appreciation is usually defined as the increase of value which may be attributed to advancing costs of replacement."[2] Again, the definition often includes the vague expression, *changes in markets.* "Assets sometimes appreciation through changes in the markets or other causes;"[3] "Appreciation is the increase in value through improvement in condition or market value."[4] The special committee on accounting terminology of the American Institute of Accountants has defined appreciation[5] as "an increased conversion value of property (securities, real estate, etc.) or mediums of exchange (coins, bullion or paper currency) due to economic or related causes which may prove to be either temporary or permanent." If this is perhaps a little confusing, it will be because two very different elements are included in the definition, namely, property and money. Appreciation of property will inevitably be thought of in terms of money, that is, of rising prices; but will appreciation as applied to money be always thought of in terms of property, that is, in terms of falling prices for goods? In a sense, appreciation of property is the antithesis of appreciation of money.

Because there is a clear lack of agreement in such definitions of appreciation as have been found, these ideas may be made use of as a foundation for tentatively framing an original definition. It will seem first of all that such a definition should include the phrase, "Appreciation is an accretion to the value of an asset." The use of the word accretion rather than the word increase is to carry with it the suggestion that appreciation grows as time goes on and does not come into existence at one moment of time, as one might say the profit does from the sale of an asset recently bought. The word "value" is used rather than the phrase "conversion value" because it is thought illogical to imply in the definition that appreciation can apply to the same asset for one purpose (as for conversion) but not for some other purpose.

It would seem quite proper to add also this phrase, "not attributable to an expenditure," because for accounting purposes an asset is considered more valuable by the amount of expenditures thereon. Such exclusion would ordinarily be assumed, yet it ought to be specifically included in the definition to avoid any possible confusion and to stand in antithesis to the next phrase. This next phrase would be, "but rather to a present or prospective increase in its relative financial productiveness." This last clause of the definition is the new part and therefore, perhaps, calls for some further consideration.

Looked at through the eyes of a business man, this phrase is readily justified. The owner looking at his property may say that it is worth more now than it was before. If we asked what makes him think so, he would probably answer that he could get more for it now than it cost, or more than it cost less accrued depreciation. Or he might say that it would now cost more to reproduce the same property and that therefore it was worth more. Yet one could point to the idle brewery plant down the street—it, too, would cost more to reproduce, but it is not worth more for that reason.

If we ask this owner whether he would himself give more for the property under consideration if it were not his, he would probably reply that he certainly would give more, just as other people would do. Why, we ask him, would he and other people give more for this property now than before? He would then answer, no doubt, that the

[1] Cyclopedia of Practical Accounting, vol. I, p. 4.

[2] Paton, Accounting, p. 625.

[3] Lisle, (Ed) Encyclopedia of Accounting, vol. I, p. 126.

[4] Sherwood, Public Accounting and Auditing, p. 244.

[5] Journal of Accountancy, September, 1922, p. 234.

main reason was because the returns (profits) are such as to justify that price. But, we would point out, outsiders do not know the profits and consequently could not be influenced by such facts. He would probably answer that they could guess what he was earning, or they might estimate what they could earn themselves and thus get a basis for their price. In fact, the outsiders might have new ideas and believe they had new methods by which to make this property even more productive of profits than at present. In that case, they could offer a higher price than the present owner would expect. This is the practical view of "value" and, as one might reasonably expect, the theoretical view of "value" is very much like it.

It is not necessary here to go very far into the field of economics or to examine in detail the discussions on value which receive so much attention there. Although this is one of the points where business and economics very definitely make contact, it is sufficient to say that in economics the value of goods for final consumption is usually held to be due to the *marginal utility* of those goods, or simply, to the relative usefulness to us at the moment of one kind of goods in contrast to other kinds of goods. Goods which are used for production, however, are valued according to a different principle. We have no interest in productive goods themselves except that they shall produce for us, that is, bring forth goods which have such relative usefulness to consumers that these goods will be in demand at a price above cost. We can judge the value of productive property, therefore, only by reference to the product or service coming from it. The more productive a property is—in terms of goods and net profits—the more valuable it is considered.

Since the valuations with which accountants are concerned refer more generally to production goods than to consumption goods, the basis of consumer's valuation is not of much concern here. On the other hand, the idea of "productivity" is quite properly a part of the accountant's definition of appreciation. The proposed tentative definition completely assembled, therefore, is as follows: "*Appreciation is an accretion to the value of an asset not attributable to an expenditure but rather to a present or prospective increase in its relative financial productiveness.*"[6]

But definitions alone are necessarily subject to inherent weaknesses. They seldom are inclusive enough to cover many of the cases which would be pertinent. And, moreover, it is usually impossible to construct an intelligible sentence broad enough to embrace the whole of an idea or concept. The best way to get an understanding of what a thing is will usually be to look into its causes and its effects.

We know the effects of appreciation. It directly or indirectly gives the basis for many of the arguments before commissions and courts in favor of rate increases for utility companies; it gives rise to numerous appraisal companies and groups of experts in "replacement engineering"; it leads business men to wonder whether they can derive any benefit from its existence; it brings to the auditor many new problems concerning the proper presentation of financial condition by means of the balance sheet. The effects are indeed well known, but it is doubtful whether the possible causes of the phenomenon of appreciation have yet been assembled or closely scrutinized.

Just as ideas from economic theory may help to frame a definition of appreciation, so some suggestions of the causes of appre-

[6] Compare Johnson, Introduction to Economics, p. 277, where the opinion is expressed that the only fact a buyer or seller of a property need consider is whether or not good reasons can be found for believing that the earning power will be maintained. Also see Grimes and Craigue, *Principles of Valuation*, p. 5, where after a number of citations the statement is made that an almost unlimited number of opinions might be cited to show the practically universal acceptance of the concept that the power to produce income creates and determines capital value, while opinions to the contrary are notable for their comparative rarity.

ciation may be found in considering economic causation generally.

The question is this: What causes operate to bring about increases in financial productiveness, which is to say, appreciation?

The first thought which comes naturally to mind in answer is that intelligent applications of capital and labor will increase productiveness. Swamps may be drained, shore lines filled in, deserts irrigated. One who owned and drained a swamp would feel that here was appreciation indeed; that the land was now worth much more than formerly. But we must see that the worth of the reclaimed swamp still remains to be determined. The drainage expenditure *ought* to enhance the value, but will it actually do so? The test is in the land's new desirability, in its productivity, in the realization of the possibility for some one to profit. More expenditure does not of itself produce new value, although for record purposes it is the best figure available. The expenditure is made with the hope that new value will be imputed to the land, but not with the assurance that it will be. The reclaimed soil may be too acid to grow good crops, or transportation conditions may be such that truck crops from the land could not be brought to market in competition with other areas. Any number of conditions might exist or come into existence which could make the investment in drainage a dead loss.

This example lends force to the statement of principle that expenditure is not a cause of appreciation. As is shown in this example, appreciation is very highly conjectural until put to the test of the judgment of a real buyer, and the real buyer will be actuated principally by the prospect of profitable productiveness.

Another attempted answer to the question might be that able management brings about increased financial productiveness, and that it is therefore a cause of appreciation. The returns from an enterprise may indeed be very materially influenced by managerial ability as expressed in better organized factory operations, in mass production by machinery, in decreased costs, in monopolized products or territories, in advantageous legislation, and the like. Under any conditions like these a plant could undoubtedly be made worth more than formerly. Managerial foresight, for example, acquires a closed-down brewery property and turns it into a highly efficient ice cream factory. There is a distinct increase in value; but the increase is due only partially to management as such—the change is directly due to the new lease of life, the new earning power. It is not management that explains the increase in value of the plant, but productiveness.

The most skillful utilization of a property could not increase the worth of that property by making it produce useless articles. Imagine the most ingenious machinery, the shrewdest financiers, the best advertising writers, etc., all combining forces to produce, say, soap bubbles, in quantity, colors, and dimensions. Any appreciation assumed to follow upon skillful management is thus seen to be highly conjectural until subjected to the test of profits.

If one looked alone to the conditioning factor—such as an expenditure or the management—the significant words are, "it may or may not" contribute to an accretion of value; but where one is looking at a real cause, the significant words are: "it does, or it does not" produce an accretion. Thus present or prospective increases in productivity *do* give rise to appreciation whenever those increases are recognized; and there is no appreciation when they are absent. Skillful management or intelligent expenditure *may* contribute something to the appearance of appreciation, but only as they promote increased profits or prospective increased profits. And on the other hand, they may be present and not produce appreciation, or other factors may be responsible for its appearance.

Social and industrial progress is often considered an explanation of appreciation. But a close examination of the factors underlying such progress is likely to show that economic progress, too, is merely a conditioning factor; it may underlie depreciation is one place while fostering appreciation elsewhere. The real explanation of appreciation here, as elsewhere, lies in a present or prospective increase of productivity and profitableness. In this way, appreciation is referred to a single phenomenon, although that phenomenon in turn may be variously explained.

Economic advances may be divided into Social Progress and Industrial Progress. Under the heading of Social Progress, the principal factor is increase of population. It is evident that as population increases, the natural variations in fertility of available land will be accentuated since the amount of new land is limited and since the demand for land products is increasing. The result is that the land "appreciates", i.e., is more in demand. The same consequence follows upon increased concentration of people in cities; the more people passing a given street corner, the more valuable the neighboring sites will be for certain business purposes. One owning a lot thus situated will some day see his property appreciate; i.e., some one will buy it at an advance in price, if he cannot utilize it to advantage himself.

But mere numbers, mere concentrations of people without some rising standards and some increasing means of satisfying those new wants means slums or worse, not appreciation in property. Other elements than population are also necessary for social progress. Some of these other important factors are: increased security of person and property, stability of employment, larger earning power, higher standards of living, and more wealth per capita. Where such conditions are present, there may be appreciation in some properties. Additional purchasing power in the hands of the people is equivalent to an increase in population in its effects upon values. The same is true of higher standards of living. These conditions often underlie appreciation, but not necessarily or inevitably; other conditions may exert counter-pressure; some places and some properties may appreciate under some of these conditions, while others are being very adversely affected. Changing tastes along with increased earning power, or new laws and customs, may just as readily prove disastrous to individuals as profitable. Consequently, general social advance within a country does not mean inevitable appreciation to all alike. The problem is always extremely individual, as is so often the case in accounting. Social progress, therefore, is not of itself the explanation of appreciation, although it contributes largely to the increased demand, which makes for the increased productiveness, which accounts for appreciation.

Under the heading "Industrial Progress", the principal factors are science and invention, and transportation and communication. Invention, for example, makes deeper drilling possible, and old oil wells are thus brought back into production again; science devises the cracking process for increasing the proportion of gasoline extracted from petroleum, and oil refining plants become more valuable; science and invention working hand in hand produce marvels in power machinery, and factory sites increase in value as a result. The effect of good transportation is likewise similar to an outright increase of population. Transportation and quick communication do not exactly enable a man to be in two places at once, but, within a given period of time they enable him to affect industry as if he were several people. It is but another phase of the concentration of people; locations favored by transportation are like street corners with dense pedestrian traffic.

Such conditions as these make up economic causation. They are factors or agents which help us to understand what

appreciation is; but only indirectly are these factors themselves responsible for the phenomenon of appreciation. For "appreciation", like "value", exists in men's minds and is not inherent in any particular set of conditions. If men decide a property is worth a certain price to them and pay more for it than it cost, that property undoubtedly has appreciated. What prompts them to offer a price which means appreciation is simple self interest—expectation of profit on the investment. The reason they can get an added productivity is, on the other hand, a complex of a great many things, a result of very intricate economic causation, social, as well as industrial and managerial.

It is sometimes said that a given structure would cost more now to build and that it has therefore appreciated. Such a proposal rests solely upon an upward change in prices and construction costs, and consequently is equivalent to saying that cost prices determine value. This thought calls for further consideration.

We know that the cost price of an article bought for resale is not necessarily a measure of its value—we have all seen too many "mark-down" sales and too much unsalable stock. No customer feels under any compulsion to pay us an article's cost or more; he judges its worth to himself and either pays our asking or not, accordingly. It is true that we do not hesitate to use the cost price in the accounting records, but this is not analogous to considering that figure as *value*. The price is an ascertained fact, an expenditure, a closed transaction; it calls for a *tentative* record, but what will happen next to the article, what its value will prove to be, remains to be seen. The record is not intended to represent value, but cost—outlay—an item in suspense, so to speak. Accounting records, from the very nature of the case, cannot record value.

Neither does the price paid for an item of equipment bought for long-time productive use measure its value. Its cost may be less than $500, but it may be indispensable to the operation of the whole plant—an engine connecting rod, for example. Its value is far more closely related to its relative usefulness than to its cost price. "Value" as such is so intangible and illusive that common sense dictates the use of price for record purposes, in lieu of anything better. But the acceptance of price for this purpose is merely a practical makeshift, and cannot be considered to prove that price (or reproduction cost) is the basis of value.

The situation is much the same with the cost of goods made rather than purchased complete. The record, such as process inventory or the finished goods inventory, is a record of *recoverable outlay*, not of value. Like goods purchased, the goods manufactured are, as it were, in suspense awaiting final disposition. What they are worth will depend upon future circumstances, not upon past acts. If buildings or other fixed plants are acquired or built, their cost is recorded as the only fact about them which we know to be a fact. What the fixed assets are *worth* depends upon other considerations. Neither the original cost nor the reproduction cost of the Carnegie steel plant, for example, was of any interest to the financiers engaged in forming the United States Steel Corporation; to them the "value" of the plant was whatever Andrew Carnegie would take, for without his company the consolidation could not succeed.

Such is the relation between price and value for goods bought complete or produced on the spot. There may be a further question in regard to the relation of *subsequent* prices and the value of goods or properties previously bought or constructed.

Fluctuations in the repurchase prices of goods held for sale of course call for corresponding changes in resale prices. The merchant who fails to mark up his prices as replacement costs go up is selling for less than his competitor who bought after

he did, and thus may lose a profit which he might have had; the merchant who fails to mark his prices down when the market falls will lose business to his competitor who bought later than he did. There can be little question therefore regarding the proper *pricing policy*. But there is a serious doubt whether subsequent price changes can be considered to affect *value*. If actual cost prices (outlays) as discussed above cannot be considered an expression of value, certainly *subsequent* replacement costs cannot be an indication of value. Later prices may be an indication to the manager that he should change his selling price, but they are in no wise proof that the value of the goods to the customer has correspondingly changed, and it is the latter who sets values by choosing what is relatively most useful to him.

Similar principles would seem to apply to changes in construction prices (costs) subsequent to the erection and use of plant buildings. Any one considering entering business or contemplating an expansion might very well deliberate upon the alternative of building a new structure at present prices or of acquiring a suitable plant already built. Any one thinking of selling a plant would also give attention to changed prices because possible buyers would be doing the same thing. But to consider that a building in use is more valuable because it would now cost more to construct is a very different thing.

The proposition does not look very logical on the face of it, but this is the reasoning we sometimes find: A most troublesome problem is that of financing a new unit at a high price after an old unit at a lower price is worn out. So it is urged that the reproduction cost of an old plant be amortized into the cost of producing goods or services in order to recover enough from the sales price ultimately to replace the plant physically. But it should be noted that this shifts the position from one of urging a certain valuation because the property would cost more to build (which would sound so illogical) to one of saying that the returns from sales or service should cover the replacement of property exhausted in service (which sounds quite reasonable). If the latter proposition be accepted, it is then suggested that the easiest way to accomplish that end is to revalue the plant upon a reproduction cost basis and charge depreciation on this value. In this way appreciation is brought into consideration, not upon the theory that there has been an *increase in value* in the asset, but for the reason that earnings must be obtained to cover some future event—replacement. The reasoning, then, is in this order: If construction costs remain high or advance, and if or when replacement becomes necessary, a new unit will cost more than the old, accumulated depreciation on original cost will not be enough to finance the new unit; in order to provide more finances, accumulated depreciation should have been increased; to do this most easily, the basis of the depreciation (i.e., asset value) should be marked up. Thus increased cost of possible future replacement units (i.e., advancing price levels) is held to bring about "appreciation" of past acquired units, and thus depreciation is given the responsibility of providing new units in spite of the fact that this duty is usually thought to rest upon *finance*, and further in spite of the fact that the usual conception of depreciation is simply as a means of passing on to present consumers a fair portion of the past expenditures which are responsible for present service.

The strongest advocates of the idea of making practical use of reproduction costs are the public utilities. But theirs is a special case. Their revenues are under the control of regulative commissions rather than competition, and adequate pure surplus reserves are not encouraged, although their use could solve many problems. However, so long as the valuation practices advocated are consciously perceived to rest upon expediency and not upon any real

theory of value, and so long as such practices are not accepted as precedents for industries which have no artificially controlled income, no particular harm is done by the use in utility companies of reproduction cost as a rate base.

But even an acceptance of the theory that reproduction costs reflect value would not clear the issue, for the question must still be faced of how dependable such a base would be. Since the theory is primarily a phenomenon of changing price levels, it is pertinent to inquire what the price movements of the past have been. We cannot know what the future holds.

A chart has been prepared showing the course of average wholesale prices for more than 125 years.[7] Its principal features are the three peaks at the time of three modern wars, and the two valleys between the peaks. This tells of instability of prices. If average prices are unstable, particular prices, such as construction costs, are likely to be even more variable. Instability of prices means that the future is uncertain at best. To say the least, reproduction cost is out of date immediately. It is therefore serviceable only as of a given moment, as in the valuation of an enterprise for purchase or sale. To say that every balance sheet is "a valuation as of a given moment," and that therefore replacement value may be used, is practically equivalent to repudiating the usefulness of double entry bookkeeping for statement purposes and to turning completely to single entry balance sheets—statements by tally and guess, rather than by the accumulation of recorded outlays.

It might be argued that original cost (outlay) is also out of date immediately as price changes. But it must be clear that an expended cost is fixed, settled, closed; something else changes—subsequent prices, value, perhaps—but not outlay. Once cast loose from the anchorage of ascertained fact and there is nothing definite to tie to Only surmise remains, "perhaps," "if," "provided"—an infinite variety of possible figures, as various as individual opinions could make them, but nothing definite.

The chart also shows long rises and long drops. What of these? If prices in the next ten or twenty years follow the experience of the past, now twice repeated, a long gradual decline may be expected. Where will "reproduction value" theory be then?

It may be expedient, even necessary, to be governed in times of rising prices by current developments—like the merchant changing the price tags in his window as conditions change. But temporary expediency is no proper basis for good theory, and shifting conditions do not establish principles.

It would seem then that a close analysis of the foundations of appreciation point to a single explanation, namely, a *present or expected increase in relative financial productiveness.* This condition may be influenced by a number of different circumstances or by a combination of several, but there is only one basic explanation—i.e., productiveness.

Both expenditures of capital and able management work changes in productiveness which undoubtedly contribute to the appearence of appreciation, but neither of them can be said to explain appreciation. Here something tangible has been done, intentionally and under control, which produces a recognizable result. To one conversant with conditions both prior and subsequent to this result, the reality of appreciation thus brought about would be open to little question; it would be plainly demonstrable through the changed earning power. Appreciation there seems clearly akin to, if not actually identical with, goodwill. And since the principles governing goodwill valuation are well and conservatively worked out, they need no recapitulation here, and this phase of appreciation needs no further consideration.

[7] Carl Snyder, *Business Cycles and Business Measurements*, p. 58.

Certain other conditions may underlie increased productiveness, thus contributing indirectly to the appearance of an appreciation. Gifts of nature, mineral or oil deposits, by the laws of private property belong to the owner of the property concerned. Appreciation here offers no problem, for the property together with the newly discovered minerals is worth vaguely whatever it will bring. The reality of the appreciation is unquestioned, but the value of the property is wholly dependent upon its productivity; the measure of the appreciation is wholly in the future. Men may guess—and buy; or they may guess—and refuse to sell.

Increased productiveness may also follow upon social and industrial progress, thus producing an appreciation of property. Here again is a real enough increment, although, like the gifts of nature, it is measured by the activities of those who enjoy it. Except as it can be judged by the profits flowing from the property, it is immeasurable and shifting. The neighborhood which is up today is before long far down in the list of the desirable; the advance of the arts which today seems so secure may be obsolete tomorrow; taste and fashion may make or break enterprises almost over night. One may feel that appreciation is present, but its measurement in the absence of a market transaction is well nigh impossible. Before we can convert conditions to our advantage, changes may take place which throw all calculations to the winds. Consequently, estimates of appreciation founded in social and industrial progress are unreliable and extremely difficult to make.

Appreciation which is real—insofar as human limitations can judge productiveness—probably deserves recognition wherever a satisfactory method of measuring its extent in the individual case can be agreed upon. It is doubtful, however, if it will be possible to distinguish practically between increased productivity from current form-changing or place-changing operations, from the foresighted investment of capital or from high managerial efficiency, and increases to be attributed to social and industrial progress. As a result, appreciation that is real will have to receive the best treatment possible under the individual circumstances, predicated upon a full knowledge of those circumstances. And the most important of these circumstances is Earning Power. This is not unlike the consideration given to goodwill. There is always the added caution: to be as conservative as conditions will permit, in the absence of an outright determination of the amount involved by an actual and closed transaction.

The above summary, it will be noted, has not included appreciation founded upon changing price levels. This omission is made advisedly, for the analysis of the nature of appreciation here presented leads to the exclusion of any increment of value said to be due to increased reproduction costs. Such "appreciation" is both unreal and unearned. It rests upon a misconception of the true function of depreciation and upon an erroneous concept of cost of production. It implies that prices determine value, whereas prices merely measure value at the moment. Value is determined by the productivity of the instruments concerned, and the value of the products of these instruments in turn rests upon their relative utility to consumers. Consequently, it is difficult to see how changing reproduction costs could in any way be accepted as producing an appreciation.

As a conclusion, it would seem that the definition proposed for appreciation may be taken as a fair picture of its real nature, since it emphasizes a present or increased productiveness and excludes changing reproduction costs as a basis.

COMMENTS BY C. C. CARPENTER,
MARSHALL COLLEGE

It is very difficult to discuss the meaning of appreciation without giving some attention to the manner of handling it in the accounts.

That appreciation is an increase in value is commonly accepted. However, "value" carries no clearly defined meaning. In accounting, the terms cost value, replacement value, market value, going value, service value, and others are used. These are helpful in the explanation of the specific accounting processes, but they leave us in confusion as to the meaning of the term value when it is used by itself. Turning to economics, we find the term value used in the senses of subjective and objective value. Most generally, however, value means exchange value, or the amount of other goods that goods will command in exchange. This abstract term is used in economic theorizing with a great deal of success. In most of the practical economic processes, however, price—or the amount of money goods will command in exchange—is used in the place of value. If value and price were always synonymous, the accounting records would always include true values, either past or present. But instead, fluctuations in the value of the money unit may cause a great change in prices with no change in real values at all. Accounting is concerned with the recording of value as it is measured by prices. Since value and price are constantly changing, either from changes in the relative values of goods or from changes in the value of money, it is almost physically impossible for accounting to keep a record of all of them. The accounting records show values that were true at one particular time, but which are not continuously true. The increasing attention being paid to the problem of accounting for appreciation is partly due to this attempt to make accounting continuously exact instead of historically exact. The forces causing changes in value are dynamic, changing over brief periods of time. These changes often are not represented by transactions which call for changes in the accounting record. Consequently accounting records will not be strictly accurate.

From the general conception of appreciation, it seems that it ought to be an easy matter to construct a good definition for the term. A general survey of accounting literature will show, however, that much more attention is being paid to the treatment of appreciation in the accounts than to an exact definition of its meaning. It is generally stated that appreciation is due to an increase in the value of assets over a period of time. Some authorities improve this by calling it an accumulation or accretion of value. Not much attention is given to the cause of the increase in value, though some have attributed it to rising reproduction costs, or to changes in demand. Neither accounting nor economic theory can accept such explanations. Economic theory probably would be satisfied in explaining generally all changes in value by changes in the intensity of supply or demand. A fuller discussion would explain that costs determine the supply when the goods can be reproduced, and that marginal utility determines demand. It seems then that much can be done to improve the explanation of appreciation by giving some attention to the forces that affect demand.

In "A Study of the Subject of Appreciation" prepared by the graduate students in accounting at the University of Illinois under the direction of Professor A. C. Littleton, a definition of appreciation is given that corrects many of the above mentioned defects. Appreciation is defined in that study as "an accretion in the value of an asset not attributable to an expenditure, but rather to a present or prospective increase in its relative financial productiveness."[1]

The word "accretion" in this definition emphasizes the fact that appreciation is usually not an instantaneous increase in value, but that it is rather a continuous process going on over a period of time. The cause of the increase is explained in a way that should be satisfactory to both the economic theorist and the accounting theorist.

Since the contributions of the Marginal Utility School to economic science, economic theory has generally explained the value of capital goods by the imputed discounted value of the income which they will produce. The income is capitalized at the current rate of interest. The word "productiveness" in the above definition seems to be used in harmony with economic theory. To the business man the process of valuation of assets seems to be

[1] Op. cit., p. 4.

merely a matter of common sense. He considers the value of an asset to be dependent upon what it will produce in the form of increased profits. Of course, the discount process is used to determine the value of goods that will be productive in the future. An unproductive asset will not be considered valuable no matter how great the expense to produce or reproduce it. Abandoned buildings which we often see would probably cost a great deal to reproduce, but no one would say that they were valuable. The accountant is already familiar with this process of valuation since he uses it to determine the value of bonds and other investments.

It should be noted that the definition just read includes the words "relative financial productiveness." This would indicate that appreciation is not caused by changes in the general price level. With a rise in the general level of prices, the relative productiveness of different assets probably would remain the same. If index numbers were perfect enough it would be possible to distinguish between changes in prices caused by changes in value and changes in prices caused by the changing unit. At present it is practically impossible to distinguish between these two kinds of changes in prices.

The above definition gives no attention to the effects of appreciation. These, however, are well known to the accounting profession, and are not a necessary part of the definition. The problems of accounting for appreciation, distribution of dividends, and basis for rate increases in public utility industries are effects of appreciation.

The indirect causes of the increase in the value of assets are numerous. Expenditures may increase the value of assets, or good management may cause all the assets of a business to be more valuable. Moveover, there are some cases when appreciation may arise because of some physical change in the asset. Back of all these apparent causes of the increase in the value of assets lies the increase in productivity.

The special committee on accounting terminology of the American Institute of Accountants has defined appreciation as "an increased conversion value of property (securities, real estate, etc.), or of mediums of exchange (coins, bullion, or paper currency) due to economic or related causes."[2] This definition includes the increase in the value of money which is seldom thought of as appreciation. Increase in the value of property would naturally be thought of in terms of rising prices, but it is doubtful if falling prices would be thought of as being an appreciation of money. There is no other way by which money can appreciate, however.

The above definition is very indefinite when it explains the cause of the increased value by "economic or related causes." There are few phrases more general than "economic causes." It would be inappropriate to insist upon the phrase "conversion value" since appreciation may exist whether there is any intention to convert the asset or not.

Appreciation is sometimes thought of as being caused by the appraisal of assets. The statement is made that appreciation is the difference between original cost and appraisal values. Since appraisal is usually based upon reproduction costs, it seems a mistake to call it the cause of appreciation. The reproduction cost of an asset in some cases might be very great, but that would not guarantee an increase in its power to produce profits. The argument for making appraisal the basis of appreciation seems to be similar to the old cost of production theory of value in economics. The cost of production theory seems to fall down in the valuation of capital goods more completely than it does in the valuation of consumer's goods. The cost of reproduction can only affect value through productivity.

One of the aspects of appreciation that has caused a great deal of controversy is the financing of a new asset at a high price to replace an old asset at a low price which has worn out. It has been argued that the reproduction cost of the asset be used as a basis for charging for goods and services in order to recover enough from sales to replace the asset. In this way appreciation is brought into consideration, not because there has been an increase in productivity, but because there ought to be.

The public utility industries have been outstanding in the argument for using replacement costs as a basis of valuation. Their

[2] Journal of Accountancy, September, 1922, p. 234.

position is different from that of the unregulated industries, but does not seem to justify the argument that value depends upon replacement costs. It would seem better to explain the increase in the service charge on the grounds that it is an expedient means of financing. The use of increased depreciation charges in the accounts in order to provide for replacement indicates a misconception of the true function of depreciation. Even in the case of regulated industries, it is a mistake to say that rising replacement costs produce appreciation.

The highly abstract nature of appreciation is evident throughout this discussion. In a theoretical way it is possible to demonstrate the reality of appreciation. In practice it is always difficult to determine just when it is real. The definition here requoted seems to cover the meaning as nearly as is possible:

> "Appreciation is an accretion to the value of an asset, not attributable to an expenditure, but rather to a present or prospective increase in its relative financial productiveness."

COMMENTS BY HENRY RAND HATFIELD

The discussion goes too far afield. The subject of interest is the treatment of appreciation in accounting. Consideration of the nature of value belongs to economics rather than to accounting. Much stress is laid on the marginal utility theory of value, but that is not the only accepted theory. There are economists who deny its validity altogether. When discussing a really difficult question—and the proper treatment of appreciation is indeed difficult—it is harmful to obscure the issue by bringing in an irrelevant consideration of a controversial nature.

Similarly, it is objectionable to bring in the discussion of the cause of appreciation. If one were discussing whether merchandise is to be marked up when the market price has risen, it would only obscure the discussion to raise the question as to whether a high protective tariff does in fact, raise prices to consumers. The issue should be kept clear.

The difficulty of appraising value is overemphasized. The paper professes to discuss the problem of accounting for appreciation in its general aspects. Its statements should apply to all assets. But certainly there is no difficulty in determining the value of some assets, as, e.g., securities or commodities listed on a public exchange.

It is also incorrect to assume that a change in value is limited to the case of a sale. It may, or it may not, be proper to limit dividends to profits realized through a sale; but it is absurd to say that if I have definite assurance (which is possible) of being able to sell at a given price, that the value is not there just as much a moment before the sale as a moment after.

More fundamental is the author's confusion in regard to value. Part of the time he states that value is exchange-value made manifest by a sale; at other times it is what one might be willing to pay if he could not obtain the article at a lower price. A serious discussion should not follow the advertisements of Beecham's Pills: "Worth a guinea, cost a shilling." In economics the emphasis is placed on the shilling, not on the guinea. But the author, while he might conceivably use either, confuses all by using both concepts of value at the same time. In his illustration of the broken connecting-rod which can be replaced at a low cost he ascribes to it a value apparently represented by the capitalization of the profits of the factory. Without the connecting-rod the entire plant is useless; with it the profits will amount to $10,000 a year; hence its value is high. But the same thing is true of the fly-wheel, and of the piston, and of the governor, and of every other part. The absurd result is reached that the sum of the value of each of the parts is a fabulous amount; the capitalized value of the entire profits multiplied by the number of essential parts making up the engine.

Rejecting other definitions the following is advanced:

> "Appreciation is an accretion to the value of an asset, not attributable to an expenditure, but rather to a present or prospective increase in its relative financial productiveness."

The term "accretion" is here used to exclude "increases that come into existence at one moment of time." But whether the increase is gradual or comes *per saltum,* does not affect its existence nor alter the problem as to how it should be treated in accounting.

The definition purposely excludes appreciation in mediums of exchange, which is included in the definition of the American Institute of Accountants. The *reason* for so

doing is unsound. Whether the man on the street properly looks upon an appreciation of money in terms of falling prices or not, does not affect the fact that money too may be subject to appreciation.

The phrase "not attributable to an expenditure" does not belong here. If it merely means that not every expenditure represents increased value that is true, but not pertinent. If it means that an additional value purchased at a cost is not appreciation that is also true, but need not be stated. Granted that every expenditure does not involve the gaining of a corresponding value, there may be an increase of value attributable to an expenditure, but far exceeding it in amount. The illustration given on page 5 of the drainage of a swamp is conclusive. If the owner of swamp land, of which there is much available at a low cost, improves it by drainage the value may be increased far in excess of the expense of the improvement. Here is an increase in value attributable to an expenditure. To the extent that the increased value exceeds the cost, is it not a case of appreciation?

The following statements are made:

> . . . . increases in financial productiveness, which is to say appreciation.
>
> Appreciation is an accretion to the value . . . . attributable . . . . to an increase in its relative financial productiveness.
>
> The present or prospective increases in productivity do give rise to appreciation whenever these increases are recognized.
>
> For "appreciation" like "value" exists in men's minds and is not inherent in any particular set of conditions. If men decide a property is worth a certain price and pay more for it than it costs, that property undoubtedly has appreciated.

Here are found four conflicting statements:

1. Appreciation *is* increase in productiveness.
2. Appreciation is not the same thing as increase in productiveness, but is caused by the latter.
3. Appreciation is caused by increase in productiveness only in certain cases, i.e., where the increase is recognized.
4. Appreciation is not due to increase of productiveness but to "men's minds."

Again, it is said, "Illogical to imply in the definition that appreciation can apply to the same asset for one purpose (as for conversion) but not for some other purpose."

This statement is absurd. There are many different values. U. S. bonds when held by a National Bank as a condition for doing business, increased greatly in market value (an appreciation for conversion). But as the bank was required to hold them there was no increase in the value to the going concern, as the value could not be realized while the bank continued business and they would be paid at par.

> . . . .in economics the value of goods for final consumption is usually held to be due to the marginal utility of those goods. . . . . Goods which are used for production, however, are valued according to a different principle.

There are many economists who do not accept the marginal utility theory of value at all. But there are thorough going advocates of that theory who do apply it consistently to production goods as well as to consumption goods. I do not enter into the merits of the controversy but object to the sweeping statement, especially as it is irrelevant.

> We know that the cost price of an article bought for resale is not necessarily a measure of its value —we have all seen too many "mark-down" sales and too much unsalable stock . . . . what will happen next to the article, what its value will prove to be, remains to be seen.
>
> The record such as the process inventory or the finished goods inventory, is a record of recoverable outlay, not of value.

The argument is that cost is not value, because the value of the article may change. It is not value, says the author, but "recoverable" outlay. What assurance is there that the outlay is recoverable? The argument through most of the chapter is that the future is uncertain, that no statement should be made which involves "perhaps", "if", "provided". Surely the statement that cost is recoverable involves a myriad of uncertainties.

The argument in regard to the necessity of changing selling prices when replacement costs change is inconsistent. It assumes that in one case the purchaser will pay the higher price, in the other that he will not do so. But there is nothing shown to prove that the reverse might not be true, for the author states that the change in replacement costs does not necessarily produce a corresponding

change in the value of the goods to the consumer.

"Accounting records from the very nature of the case, cannot record value."

This is gratuitous assumption. The author has admitted that there is such a thing as value, that at times (when a sale is made) value is determinable. There seems nothing "in the nature of the case" which prevents recording values when they are known.

Furthermore the assumption is frequently made that costs are alone to be used in accounting because of the fact that they are "fixed, settled, closed; something else changes —but not outlay. Once cast loose from the anchorage of ascertained fact and there is nothing definite to tie to."

It is granted that a price paid out over the counter is a definite fact. But is the cost of the article definite? Are purchase discounts to be deducted from price paid in determining the cost of the article? Do salaries and expenses of buyers enter into the cost? Still more difficult is it to ascertain the definite cost of a self manufactured article, as witnesses all the discussion anent cost accounting. Is interest part of the cost? Some accountants give one answer, some another. How much of the overhead is a definite part of the cost of that particular article? Even the most elaborate schemes of distributing overhead costs are in essence rules of thumb, and are not "fixed, settled, closed, definite."

What is the cost of a plant purchased by the issue of stock of a new corporation? To say that it is the face value of the issued stock puts the cart before the horse.

To argue for costs as the basis of accounting on the ground that it is an approximation, justified because of economy and expediency may be justified. To say that costs are always definitely known weakens the argument, because the statement is demonstrably false.

The argument that "original cost (outlay) is also out of date immediately as price changes" is not considered by the author as justification of making adjustments in the accounts. His reason is that just mentioned, i.e. that one should stick to definite facts.

But there is colorable ground for an argument that the retention of the price paid is not really representing the original cost, when there has been a change in general price levels, i.e. when money has depreciated.

Suppose one had 100,000 bushels of wheat on hand and by act of government the legal definition of a bushel was changed so as to make it include only one-half the former contents. To report 200,000 bushels on hand at the later date would be the only proper expression of the actual facts.

Somewhat similarly if an asset had been purchased for $100,000 (of a given standard of weight and fineness of gold) and the government later arbitrarily reduced the content of the gold dollar by one-half, would it be correct in later statements to represent the cost as $100,000 or as $200,000. If the dollar shrinks not by direct legislation but by gradual inflation, is there not some justification in holding that at a later day the more correct expression of the actual cost would be in terms of the then dollar equivalent to the former dollars paid out?

"Since the valuations with which the accountants are concerned refer more generally to production goods than to consumption goods. . . . ." This statement is doubtful, if the author by "consumption goods" means articles suitable for consumption (merchandise). A relatively small number of machines will produce hundreds of different kinds of articles. The printing press turns out hundreds of different books. And the editions of each of these works are distributed among scores or hundreds of retail stores. There are therefore scores or hundreds of valuations to be made of books, for one to be made of the printing press. Adding the other equipment of the printing plant and the bulk of valuations still lies with the printed books rather than with the printing press.

COMMENTS BY JOHN R. WILDMAN

The proposal to recognize as appreciation only that increase in value which is demonstrable from increased earning power, or productiveness, is eminently scientific, but it leaves open the question of how to characterize those increases which result from giving effect to assumed greater value in exchange, or to theoretical replacement of property on a higher price level.

The practical purpose in defining appreciation is to brand the increase in value as a

capital addition, and to differentiate it from a current transaction which gives rise to profit.

If the assertion that appreciation gives rise to increased capital were to be generally accepted as a theorem, it would follow that any assumed or theoretical increase in the value of an asset would result only in an increase in capital.

Thus, the practical end would be achieved, even though increases in asset value, other than those due to appreciation, were not specifically classified and named.

In other words, whether the increase were denominated pure appreciation, or pseudo-appreciation, would be immaterial, inasmuch as the real increment and the assumed or theoretical increase would be treated as an increase in capital.

As a practical matter there seems to be little prospect of successfully excluding from consideration, the increase in property values which, under the prevailing price level, usually results from appraisal.

In this respect, attention is invited to the following quotation from LaBelle Iron Works v. United States (Supplement to Survey Report, page 4): "There is a logical incongruity in entering upon the books of a corporation as the capital value of property acquired for permanent employment in its business and still retained for that purpose, a sum corresponding, not to its cost but to what probably might be realized by sale in the market. It is not merely that the market value has not been realized or tested by sale made, but that sale cannot be made without abandoning the very purpose for which the property is held, involving a withdrawal from business so far as that particular property is concerned. *Whether in a given case property should be carried in the capital account at market value rather than cost may be a matter of judgment, depending upon special circumstances and the local law.* But certainly Congress, in seeking a general rule, reasonably might adopt the cost basis, resting upon experience rather than anticipation."

IS APPRECIATION AVAILABLE FOR DIVIDENDS?

Even after assuming that appreciation is a reality and that its amount can be ascertained, there is still the further question: Is the credit from appreciation available for dividends?

With regard to realized appreciation (capital gains) there is little disagreement. For taxing purposes Great Britain has seen fit to distinguish between "income" and "accretion to capital," income being considered as recurrent receipts, exclusive of both extraneous profits and of appreciation. Capital is considered as the ***property*** itself and not the *price or value* of the property. Consequently, whatever is received from the sale of property is merely a conversion or return of that property in another form. An accretion or appreciation, therefore, adheres to the property (capital) and is not (taxable) income.[1]

It should be noted, however, that these distinctions of tax practice do not carry over into the ordinary British accounting practices of determining distributable profits. For general purposes, capital gains when realized may be distributed as dividends along with operating profits, unless dividends are restricted in the articles of association to profits arising from the business of the company.[2]

Thus it appears in Great Britain that profits generally available for dividends and taxable profits are different concepts in regard to realized appreciation. In American practice, however, there is no difference; tax and general accounting being harmonious in this respect. "Income is the gain derived from capital, from labor or from both combined, provided it be understood to include profit gained through the sale or conversion of capital assets." (Regulation 69, art. 31.) "Appreciation in value of property is not even accrual of income to the tax payer prior to the reali-

[1] The Accountant: vol. 61, p. 322; vol. 62, p. 236; also see Spaulding, *The Income Tax in Great Britain and the United States.* (London, 1927.)

[2] A. Lowes Dickinson, *Accounting Practice and Procedure,* p. 194; F. R. M. DePaula, *Principles of Auditing,* p. 116.

zation of such appreciation through sale or conversion of the property." (Regulations 69, art. 28.) This for the tax point of view. Generally speaking, accounting authorities consider such gains as available but inadvisable for dividends, upon grounds of conservatism.[3]

It is in connection with unrealized appreciation, however, that the major problem of availability is found. Obviously, the issue turns upon the question of whether such appreciation is profit or not profit; if it is undoubted profit, then it is clearly available for dividends; if it is not, there may be a question regarding its availability. Consequently the theory side of the question as well as the legal side should be considered here.

"To argue that the owner of property which has doubled in value has no more wealth than before is folly. If the value, measured on the same basis that was used when the property was originally acquired has doubled, his wealth has doubled."[4] "Income is the money value of the net accretions of one's economic power between two points of time;"[5] that is to say, it is "the increase of wealth in addition to that already possessed."[6]

Evidently profit may be conceived as a net increase to wealth between two dates; wealth would, of course, be the *value* of the properties as of the two dates. By this view, then, profit, determination is to be considered a process of evaluating properties on different dates and of subtracting the most recent amount from the earlier one. In other words, it is a sort of single entry method, a statement of resources and liabilities, as if for liquidation, and not necessarily associated with double entry bookkeeping and balance sheets. But this point of view does not occupy the whole stage.

"When capital is invested in capital goods, they cannot be considered as having a capital value different from that of capital which made them possible, until they are sold and are no longer capital goods. If they remain capital goods, they have no value except that derived from their productivity, and they can have no independent valuation except their original cost, which represents invested capital."[7]

"The whole secret of the theoretically correct bookkeeping of income consists of crediting and debiting the plus and minus items of income to their proper capital sources as services or disservices rendered by those sources. The total net income is found by adding together the values of the services and subtracting the value of the disservices."[8]

"The Gross Revenue of all the inhabitants of a great country comprehends the whole annual produce of their land and labor; the net revenue is that which remains free to them after deducting the expense of maintaining, first, their fixed and secondly, their circulating capital; or what, without encroaching upon their capital, they can place in their stock reserved from immediate consumption, or spend upon their subsistence, convenience, or amusements."[9]

Here appears another view of the concept of profits, namely, gross revenue less the costs of producing it. So it comes about that appreciation will be a part of the profit calculated by the first method, unless some other device than valuation (present value) of the assets be used; and that appreciation will be excluded from the profit calculated by the second method, unless it (unrealized appreciation) be brought into "Gross Revenue" by so de-

[3] See Pinkerton, *Accounting for Surplus*, p. 21; Couchman, *The Balance Sheet*, p. 200; Kester, *Accounting Theory and Practice* (1920), p. 405. Montgomery, *Auditing Theory and Practice*, 1922, p. 281, makes the availability of capital gains optional.

[4] Paton, *Accounting*, p. 367.

[5] Haig. *Federal Income Tax*, p. 27.

[6] Weston (S. F.) *Principles of Justice in Taxation*, p. 590.

[7] Kemper Simpson, *Economics for the Accountant*, p. 121.

[8] Irving Fisher, *The Income Concept in the Light of Experience* (pam.), p. 4.

[9] Adam Smith. *The Wealth of Nations*, Bk. I, p. 124.

fining the latter term as to openly include appreciation.

Here are two rather distinct ideas; one might be called the statement of Resources and Liabilities idea of profits, and the other the Revenue and Costs idea. The balance sheet view seems to fit into a simple stage of economic development where the emphasis lies with the proprietor or enterpriser business unit. Under such circumstances, owner-profit and owner-capital are very thinly separated and it would be no great matter if capital should be withdrawn under the guise of profits. If later conditions make it advisable, the withdrawals could easily be brought back into the business and into the owner's account in the books—or the scale of operations could be reduced to suit the new conditions.

While individual enterprisers still exist in large numbers, they are singly too small to create any particular accounting or financial problem. The center of the stage is now occupied by the corporation; present day accounting problems are largely problems of the corporation. And the second, or Income Statement concept of profit seem peculiarly adapted to the corporation stage of development.

In the case of the corporation, the line between Capital and Income is a hard and fast one, and not without reason. The amount of capital invested is fixed and plainly stated from the beginning; that figure is strongly stressed throughout the corporation's life, because the capital contributors have been granted limited liability. Withdrawals of capital cannot be so easily followed and repossessed as in the case of the single proprietorship; creditors must look exclusively to the capital fund as their margin of protection against loss. This fund therefore is not to be cut into for dividends in any way whatsoever. As a result, there is considerable hesitancy on the part of responsible persons to adopt a concept of profit which would allow anything to slip into the calculations which later conditions might prove was not a profit. If unrealized appreciation were accepted as a profit, a change of conditions which wiped out the increased values might easily lead to a constructive "dividend out of capital." Consequently, the idea of profit which looks more closely at preserving intact the capital originally invested is more suited to present-day conditions, than is the "increase in wealth" idea.

A survey of the law cases which touch upon the availability of profits for dividends shows a similar division of opinion upon the question of appreciation. With regard to realized appreciation, there is but little divergence in the cases. In an early case (1875) in which the issue had arisen of whether or not a partner was entitled to half of the profit resulting from the sale of a mill, the court held that, in the absence of any special agreement, the mill was an asset of the partnership, and that upon the sale of the business, under which the purchase money of the mill was largely in excess of its value on the books, the difference was profit divisible in the proportions in which the profits of the business were divisible at the time of sale (Robinson v. Ashton, 20 Eq. 28). At a much later date the holding was unchanged. Thus in 1919: where property is sold by a corporation at an advance over the original price the amount of such advance is a gain or profit received during the year for the purpose of computing its net income—under the Corporation Tax Act of 1909. (Scott v. Schwab, 255 Fed. 57.)

But on the point of unrealized appreciation, more cases will be needed, for the views are divergent. From the definitions given for profits available for dividends, it is often possible to judge whether appreciation could be included by implication. In some few cases, the courts have definitely stated whether it was or not available, but these cases are infrequent. Since there is a good deal of disagreement and since the inclusion or exclusion of appreciation often has to be inferred or interpreted from the phrasing, recourse must be had to de-

cisions rendered in several different states.

Ruling case law, as summarized in Corpus Juris (vol. 14, p. 802), makes three separate points on this topic. The first is that a dividend is lawful if, at the time of its declaration and payment, the corporation is solvent or has assets in excess of the amount of debts and capital stock. This principle is supported by a long line of cited cases extending from 1879 to 1925. It is clearly aimed at protecting the creditors and stockholders by standing out against any declaration which would cut into either the debts or the stock. Nothing in this principle, however, indicates what may or may not be considered an asset for the purpose of showing the necessary "excess." The two other statements made in Corpus Juris, however, carry the matter deeper.

It is said there that the terms "net profits" or "surplus profits" may be defined as that which remains after deducting from the present value of all the assets of a corporation, the amount of all liabilities, including capital stock. Cases are cited in support of this principle dating from 1881 to 1916, although most of them are subsequent to 1900. The other statement is this: Surplus profits are those which remain as the clear gain of a corporation after deducting from its income all the expenses incurred and losses sustained in the conduct and prosecution of the business.

Thus it appears that two differing concepts of profits appear in the law as well as in accounting theory—one, a balance sheet idea stressing evaluated assets; the other, emphasizing income less costs.

An examination of many cases in an attempt to go beyond encyclopaedia summaries and find expressions directly upon the availability of appreciation shows some clear-cut opinions—on both sides—and some which perhaps might be construed to apply one way or another. Consider first the cases which seem to look with favor upon appreciation.

A recent decision (1925) in New Mexico, for example, makes the definite statement that "profits" have a larger meaning then "dividends" and that the former covers benefits of any kind, excess of value over cost, acquisition beyond expenditure, gain or advance. Booth v. Gross Keely, 238, p. 829.) This follows an Iowa case of 1910 (Simcoke v. Sayre, 148 Iowa 132) almost literally. Going back almost fifty years and crossing the Atlantic, we find a Scotch case of 1882 which considers "a fair, or more properly a bona fide, valuation of the assets" as necessary to the determination of the divisible profit. Liquidators of the City of Glasgow Bank v. Mackinnon, 9 Ct. of Sess. cas. 535.)

In Georgia, the same theme finds expression in 1912 and again in 1921, where stress is placed upon the present value of all the corporate assets. (Maughan v. State, 11 Ga. App. 440; Morgan v. Reid, 27 Ga. App. 123.) In other states, the statement is more direct. For example, in Missouri: Dividends can be paid out of profits or net increase in the capital contributed by the stockholders for the purpose of carrying on the company's business (Shields v. Hobard, 1903, 172 Mo. 491), and in New York in 1883: "The provisions of the revised statutes were intended to prevent the division, distribution, withdrawal and reduction of the property of a corporation below the sum limited by its charter or articles of association for its capital, but not to prevent its increase above that sum. . . . . When its property exceeds that limit, the excess is surplus and belongs to the corporation as a portion of its property, and, in a general sense, may be regarded as a portion of its capital, but in a strictly legal sense it is not a portion thereof, but is regarded as surplus profits; such surplus may be divided among the stockholders." (Williams v. Western Union Telegraph Company, 93 N.Y. 162.)

Other cases are found which may be construed as favoring the availability of appreciation; but in most of them, this must be by implication. "If on the whole capi-

tal account there is a gain, this goes to swell the year's profits (Verner v. General and Commercial Trust, England, 1894, 2 Ch. 239). "The word *income*, as used in determining whether a dividend of a corporation was declared out of accumulated income, means all accumulations, whether in money or property, and regardless of form, when first obtained or how converted and reconverted." (Saehnlein v. Saehnlein, 1911, 146 Wis. 330.) "Appellant's theory was that they had a right to declare a dividend whenever the assets exceeded the liabilities, and that, in estimating assets, they had a right to figure unsold lands at their real value on March 25 regardless of their cost price. In considering the rulings on evidence, we will assume without wishing to be understood as in any wise intimating, that appellant's theory was correct." (Privot v. Grand Bay Land Co., 171 N.W. 327, S.D. 1919.)

It can hardly be said that this showing is very strongly or definitely in favor of considering appreciation available for dividends. Of this array of cases, broadly representative in states, and in years, and including British courts as well as American, very few, if any, could be used in support of the point without more or less resorting to interpretation of the words used or construing of the judicial mind. It must be apparent even from these short extracts that, for the most part, the courts were thinking of other things than the question of whether an unrealized, and perhaps debatable, increase in the value of a property constituted a proper basis for a dividend.

On the other side, however, the courts' position is more readily determined because of the more definite, unmistakable statements in opposition to the availability of appreciation for dividends.

As early as 1872, the court was very outspoken in disallowing appreciation. "The mere fact that property has advanced in value between the date of its acquisition and sale does not authorize the imposition of the tax on the amount of the advance. More advance in value in no sense constitutes the gains, profits, or income specified by the statutes. It constitutes and can be treated merely as increase in capital." (Gray v. Darlington, 15 Wall 66.) This principle was cited with approval in 1915 (Industrial Trust v. Walsh, 222 Fed. 437) and a very similar holding appeared in 1920 in the well-known case of Eisner v. Macomber (252 U.S. 189). Here the court said "Mere growth or increment in value in a capital investment is not income; income is essentially a gain or profit in itself of exchangeable value, proceeding from capital, severed from it and derived or received by the taxpayer for his separate use, benefit, and disposal."

It may be felt that this statement of principle is weakened by the fact that the subject matter here was income for taxing purposes, and that the court was not concerned in defining income to *the corporation*. But under such a broad statement as that in our law—"gains from whatever source derived"—accounting profit and taxing profit should be very close together except where the law specifically, and for reason, makes the two different. And, were the issue the question of whether profit to a corporation was something different from profit to an individual, it is quite likely that the courts would decline to find any difference in them a corporation, in the eyes of the law, is a person and as far as possible has been treated in the courts just as a person would have been treated.

There can be little objection to taking a general purpose definition of income from this income tax case. The significant sentence is this: Income is essentially a gain or profit *in itself of exchangeable value*. In this last phrase "in itself of exchangeable value," it is likely that the court meant to indicate, as the next words show, that income was only the results of *closed transactions*.[10] This thought, therefore, would

[10] The insistence upon closed transactions as the basis of profit also appears in a much earlier case

seem to indicate that a value determined by an exchange was essential to a determination of income. The mere existence of higher replacement prices for plant assets could not therefore produce a profit.

The two principal cases mentioned above are almost fifty years apart, yet they hold very closely to the same principle. As far as this is an indication, then, there is no tendency for the courts to change their position. This fact is also illustrated by the judgments rendered in other cases, both in England and in the United States, between these dates.

The British point of view is well presented in The Accountant,[11] where it is indicated that under no circumstances can an unrealized appreciation in the value of fixed assets be legally distributed as a dividend. Several cases are cited in support.[12]

In other cases in America much the same position is taken in different language. In 1885 it was pointed out (Jennerey v. Olmstead, 36 Hom 536) that calculating the excess of the estimated value of unsold securities over their purchase price was not the way to ascertain profits and that such appreciation was not profit in any sense of the term. In a Delaware case in 1917 (Kingston v. Home Life Insurance Co., 101 Atl. 898), it was held that dividends could not be declared out of profits from the estimated enhancement in value of land purchased with corporate capital, and in Iowa[13] it was said that profits were not proved to have been earned by showing an increase in the market price of the corporation's goods, but must have been realized to be called such. The same thought is likewise expressed by the California court (Southern California Home Builders v. Young, 1920, 188 Pac. 586) as follows: "Sale, or estimated profits on partially executed contracts, do not constitute profits, because fluctuations of the market and uncertainty of the completion of such contracts may bring about a condition such as was found to exist in the present case, where profits were in fact liabilities or direct losses." In 1925 it was similarly held (Hill v. International Products Co., 220 N.Y.S. 711) that an increase in the value of cattle owned by a corporation, not realized by actual sale, was not a proper item to be taken into consideration in determining the surplus. Later the court makes the direct statement: "Increase in value of a corporation's assets should not be included in surplus."

It will be noted that the law cases make use of both the Balance Sheet concept of profit determination and the Income Statement concept, and thus afford no certain precedent for choosing between the two ideas, helpful as such as a choice would be. Yet there is a shade of choice.

These latter cases are much less vague in statement than the cases which seem to favor considering appreciation as available for dividends, and consequently the negative side of the argument gains that much advantage from the showing of the common law.

When one turns to the statutes, a similar disagreement upon the availability of appreciation may be expected, since statutory law is usually the codification of common law rulings. On the side of availability the Wisconsin statute[14] is perhaps the most direct. It says:

> Any corporation which has invested or may invest its net earnings or income or any part thereof in permanent additions to its property or whose property shall have increased in value, may lawfully declare a dividend pay-

(1889), Marks v. Monroe County Permanent Savings and Loan Association, 22 N.Y.S. 589.

[11] Vol. 27, "Appreciation of Assets and Dividends." Vol. 46, "The Valuation of a Local Authority's Fixed Assets."

[12] Bolton v. Natal Colonization Company, Ltd. (1892) 2ch. 24; Lublock v. The British Bank of South America, (1892) 2ch. 198; Foster v. The New Trinidad Lake Asphalts Company, Ltd. (1901) 1 ch. 208.

[13] Sexton v. C. L. Percival Co. (1920), 177 N.W. 88. Note that this holding is the reverse of the earlier (1910) position of the court in the same state. Cf. Simcoke v. Sayre, 126 N.W. 816.

[14] Wisconsin Statutes (1925) 182:19 (originally sec. 1765 of the Revised Statues of 1898).

able to stockholders upon its capital either in money or in stock to the extent of the net earnings or income so invested or of the said increase in the value of its property; but the total amount of such dividend shall not exceed the actual cash value of the assets owned by the corporation in excess of its total liabilities, including its capital stock.

Against availability there is the very positive and recent declaration of the Ohio legislature.[15] The statute is as follows:

No Corporation shall pay dividends

(1) In cash or property, except from the surplus of the aggregate of its assets over the aggregate of its liabilities, plus stated capital, after deducting from such aggregate of its assets the amount by which such aggregate was increased by unrealized appreciation in value or revaluation of fixed assets;

(2) In shares of the corporation, except from the surplus of the aggregate of its assets over the aggregate of its liabilities, plus stated capital.

In computing the aggregate of the assets of the corporation, the directors shall determine and make proper allowance for depreciation and depletion sustained and losses of every character. Deferred assets and prepaid expenses, excepting organization expenses and financing charges, shall be written off at least annually in proportion to their use as may be determined by the board of directors. Organization expense and financing charges may be written off in the discretion of the board of directors.

Cash dividends shall not be paid out of surplus due to or arising from (a) unrealized appreciation in value of or a revaluation of fixed assets, or (b) any profit on treasury shares before resale, or (c) any unrealized profits due to increase in valuation of inventories before sale, or (d) the unaccrued portion of unrealized profits on notes, bonds, or obligations for the payment of money purchased or acquired at a discount, unless such notes, bonds, or obligations are readily marketable, in which case they may be taken at their actual market value, or (e) the unaccrued or unearned portion of any unrealized profit in any form whatsoever, whether in the form of notes, bonds, obligations for the payment of money, installment sales, credits, or otherwise.

One could hardly ask for more definitely stated authority than this and the Wisconsin statute; or for authority more suited to supporting whichever view one wished to hold, for the statutes are in direct opposition. Nor does a consideration of other state statutes give much of an indication of the proper view by amassing weight of authority.

The state of Alabama provides[16] as follows:

Before the board of directors of any corporation shall be authorized to declare any such stock dividends, other than on a surplus of money, it shall order the appraisal of all tangible assets of the corporation by a competent appraiser or appraisers.

The use of an appraisal here would seem to suggest that appreciation might be taken into consideration in a *stock dividend*. This, however, is not at all equivalent to placing statutory sanction upon making appreciation credits available for dividends and drawing upon working assets to pay them. A stock dividend would merely "thin out" the stockholders' equity whatever that equity might be and however calculated. There is no objection to this if the stockholders wish it. There is no question here of "profits," divisible or otherwise. In the absence of a real surplus basis, the stock dividend might lead the corporation later into considerable financial embarrassment, but there could be no more objection to the procedure (stock dividend out of appreciation) than to an original security issue based on property valuations assessed by a liberal-handed board of directors.

Other than in these few states most statutes simply provide that dividends shall be declared only out of surplus profits arising from the business, thus leaving it for

[15] 112 Laws of Ohio (1927) Sec. 8623-38.

[16] Section 6991 of the 1923 Code regarding stock dividends.

the courts to decide what is that surplus and what is not.

In summary of the above, it appears that unrealized appreciation raises a very definite question as to what is the proper concept of profits.[17] The same two views are presented both in the theory discussion and in the common law; the one is that profit is an increase in wealth and consequently is ascertained from "present value" Balance Sheets; the other is that profit is the difference between Revenue and Costs and consequently is ascertained from an Income Statement. Which of these views is most favored in the court cases, it is very difficult to determine.

However, there is legal authority for both availability and non-availability. Two states, Wisconsin and Ohio, have very definite and contrasting statements in their statutes regarding the availability of appreciation for dividends; Wisconsin makes appreciation available; Ohio declares it definitely unavailable. But the weight of the common law cases seems to lie against availability.

COMMENTS BY E. R. DILLAVOU

In order to eliminate irrelevant material, I think we might do well to rule out of our discussion at least three factors: (1) profit resulting from the sale of assets which have appreciated in value, it being conceded that such profit is available for dividends; (2) English cases, because they add little or nothing to the American law on the subject and probably will not because of the difference of corporate laws; (3) reference to income tax decisions because they are based largely upon the difference between income and profit. With these limitations in mind, we shall direct our attention to the law, either statutory or case, which seems to bear upon the immediate question—the availability of unrealized appreciation for dividend purposes.

The statement is frequently made that dividends must be declared out of corporate profits. In fact, a dividend is often defined as that portion of the corporation's profit which has been set aside for the benefit of its members. Are these statements literally true? May dividends be declared from any source other than profits? A desire to protect corporate creditors and to insure the continued use of capital to the purposes for which it was invested, seems to have prompted practically all of the state legislatures to enact laws defining, at least in a general way, the conditions under which dividends may be declared. The matter has ceased to be purely a common law matter, although it is not entirely certain that the courts have discovered this fact.

Court decisions follow one of two well defined approaches to the problem, one concerned with the balance sheet, and with the values found therein, while the other is concerned with the profit and loss statement. A detailed study of the statutes of the various states reveals a natural division into three distinct groups, which, in the absence of better designations, may be called the balance sheet group, the profit statement group, and the statutory group.

The balance sheet group, so called because the statute apparently contemplates the use of the balance sheet—the relation of assets to liabilities—in determining whether assets are available for dividends, may be subdivided into two groups. The first group, in which are found seven states, imposes a penalty for, or forbids the payment of dividends when the corporation is, or will be rendered thereby, insolvent. The second group provides that dividends may not be declared whenever the capital stock of the corporation will be impaired. This group includes thirteen states. At first blush these two groups appear synonymous, but closer study reveals a marked difference. Solvency, as ordinarily conceived, consists of a situation in which the assets, properly valued, are worth more than the liabilities, capital stock excluded. An Iowa case involving the payment of dividends under a statute making solvency the test employed the following language: "It may be that, but for the payment of the dividends, insolvency would not have been incurred; but this is immaterial, if the corporation had sufficient assets to pay all the debts at the time the dividends were paid. If the whole capital stock

[17]For a summary of the concepts of profit from the field of economics see, *The Accounting Review*, September, 1928, p. 278-288.

is returned to the stockholders in the form of dividends, a creditor has no right to complain if there remain sufficient funds belonging to the corporation to pay him."[1] Other states having identical provisions, but their courts taking an opposing view, have regarded capital stock as a liability, one court stating, "It is beyond the power of a corporation to declare dividends out of its capital. They may lawfully declare dividends only out of surplus or profits over and above capital."[2] It is interesting to note that in the latter case—a suit to recover dividends declared but later rescinded—the books indicated an adequate surplus, but a question arose concerning the book figures. The court's statement is significant: "The appellant's counsel insist that the books of the respondent are conclusively determinative of the value of its assets. We think the contrary view is supported both upon principle and authority." Although the court erroneously considered capital stock as a liability, it served the purpose of preserving intact the capital for corporate purposes and it clearly indicated an intention to disregard book figures and to use actual values. Although in this instance actual values appeared to be less than the book figures, the case stands unqualifiedly for actual value as opposed to book figures generally regarded as representing cost.

The statutes of the second balance sheet group, provide that the directors shall assume a personal liability whenever the capital stock is impaired by the declaration of a dividend. Here again, we have the balance sheet approach as a basis for dividends. The statute makes no mention of profits, and while capital remains unimpaired, any surplus, regardless of its source, seems available for dividends. Whether present value may be applied to the assets in determining impairment of capital must be gleamed largely from the general language to be found in various cases, rather than from decisions decisive of the particular point. A search of all the cases involving dividends within this group of states fails to reveal a single instance in which appreciation is definitely involved, but various statements indicate a tendency to disregard book figures in favor of a fair estimate of the value of the assets as of the date of the dividend. It has never been suggested that the fixed assets, or certain of them, might be given a lower value than cost, while those having a higher value are to be limited to cost. Quotations from only two cases are inserted at this point. "In deciding whether a dividend was rightfully made, the transaction (so far as the assets are concerned) must be viewed from the standpoint of that time, and not in the light of subsequent events."[3] This statement points out that the asset values are to be estimated as of the date of the dividend and not at some subsequent date. Another quotation: "If assets are reasonably worth, or are honestly believed to be worth, largely more than the company's indebtedness, and upon this basis profits are estimated, the company is not insolvent."[4]

The two groups of states just considered appear to have discarded profits as a basis for dividends, at least profits as interpreted by the profit-and-loss statement. The largest single group of states, the profit-and-loss group, and consisting of eighteen states, appears in language, at least, to regard the existence of profits as the true criterion for proper declaration of dividends. The statute most typical of this group provides that dividends may not be declared and paid by a corporation except "from the surplus or net profits arising from its business." Under such a statute the approach seems to be the profit-and-loss statement in contradiction to the balance sheet. Appreciation may not be made the basis for dividends within this group of states unless it is definitely classified as profit.

During the history of accounting, profits have been ascertained by one of two methods, single-entry or double-entry. The former method consists of comparing assets and liabilities at one time with those of a later date, while the latter plan attempts by tracing each transaction to show the profit actually resulting from a series of transactions. Under the single entry method, it is entirely possible to accord weight to the value of the assets at the particular time the profits are to be determined. Many of the earlier cases, and some of the later ones, appear to use the

[1] Miller v. Bradish, 68 Ia. 278, 1886.

[2] Benas v. Title Guaranty Trust Co. 267 S.W. 28, 1924.

[3] 16 Fed. 506; 201 Mich. 664, 167 N.W. 898.

[4] 95 Tenn. 634, 31 L.R.A. 593, 32 S.W. 1097.

balance sheet or single entry method of estimating profits and offer excellent authority for the declaration of dividends from appreciation of fixed or used assets. A 1928 South Carolina case[5] involved a bill in equity to compel the directors to declare a dividend, under a compulsory provision in the statute. The statute provided that dividends were only to be declared out of profits. A balance sheet was presented, and a question arose concerning the inclusion of certain liabilities. During the course of its opinion the court offered the following suggestion concerning valuation, it not being apparent just what theory of valuation the lower court adopted, "In order to determine the amount of the accumulated profits available for the dividend, assuming that the values are correct for that purpose, there should be deducted from said sum the capital stock, the working capital (that being the amount stockholders by agreement set aside from profits), and all other liabilities. Manifestly, for the purpose of determining the amount to be declared and paid as a dividend, it is necessary that the true value of the assets in cash, and not the mere book value should be ascertained. The term 'net profits' or 'surplus profits' have been defined as what remains after deducting from the *present value* of all the assets of a corporation the amount of all the liabilities, including the capital stock."

A 1928 Pennsylvania case[6] stated that "'Surplus' or 'profits' denote an excess in the aggregate value of all assets of a corporation over the sum of its entire liabilities, including capital stock." A Washington case[7] decided in 1915 seems to have applied the same theory. A fishing vessel originally placed upon the corporate books at $15,000, although the promoters had paid a larger sum for it, was increased to $20,000 as a basis for dividends and the issuance of additional stock. The court said, "Where the directors act honestly and in good faith in placing a value upon the assets of the corporation for the purpose of declaring dividends, no creditor can successfully complain of such act, unless he can show fraud of some character." Georgia decisions also conform to this view.[8]

Other states in the construction of the statute directed their attention to the operating or profit-and-loss statement. California under a similar statute held that dividends were illegally declared out of capital surplus, no profits having arisen, thus making operating profits the sole criterion. An earlier California case had indicated that "profits signifies an excess of the value of returns over the value of advances. The excess of receipts over expenses that is, net earnings. The receipts of a business deducting current expenses; it is equivalent to net receipts."[10] Since these decisions the California code has been amended to permit dividends from other than profits with the consent of the corporation commission, but otherwise restricting dividends to operating profits.

A group of five states provides that dividends may be declared either from the net profits of the business or from surplus. In other words, a dividend may be justified by reference either to the profit-and-loss statement or to the balance sheet. The state of Delaware before adopting this statute had one which limited dividends to profits arising from the business. Under the earlier statute the court definitely decided that appreciation was not available for dividends. The court stated: "However accurately the increase be estimated, it is not a net profit arising from the business of the company."[11] In 1927 the law was amended[12] so that dividends may be paid "either out of its annual net profits or out of its net assets in excess of its capital stock." It is further provided that dividends may not be declared when the value of the assets shall have declined below the total of the preferred stock which has a preference in the distribution of the assets at the time of dissolution. Under such a law dividends can be declared out of operating profits irrespective of the condition of the balance sheet subject to the qualification that stock preferred as to assets must be protected. Inferentially

[5] Cannon et al V. Wiscessett Mills Co. et al 195 S. C. 119, 141 S.E. 344.

[6] Brauch v. Kaiser et al. 291 Pa. 543, 140 A, 498.

[7] Northern Bank & Trust Co. v. Day, 83 Wash. 296, 145 P 182.

[8] Maugham v State, 11 Ga. App. 440, 75S E. 508, 1912.

[10] People v. San Francisco Savings Union, 72 Cal. 199, 13 P. 498, 1887, 179 p. 540.

[11] Del. Ch. 258, 101, A 898, 1917.

[12] Laws of Delaware, 1927, p. 244, sec. 34.

dividends may be declared on the basis of balance sheet valuation alone.

A new Jersey case[13] under a similar statute serves to show how complete the option is. To a bill to enjoin a dividend because the assets did not equal the liabilities and capital stock the court replied: "The language used is from its surplus or from its net profits. The evident intent of the change is to point out two funds from which dividends may be made." Here, the balance sheet was entirely disregarded, the dividend being supported by the operating statement, but the inference was that if occasion demanded, it alone might be resorted to. Connecticut takes the opposite view and in *Davenport* v. *Lines*[14] definitely held a dividend illegal because the assets did not equal the liabilities. Book values were ruthlessly disregarded by eliminating entirely the item of goodwill placed upon the books at the time the business was purchased. Work-in-progress and an expenditure for exhibiting at a world's fair also appear to have been excluded, which clearly runs counter to present good accounting practice.

Two additional cases of recent date throw considerable light upon the meaning of the term "profits" as viewed by the courts. The case of *Dealers Granite Corporation* v. *Faubion*,[15] decided early in 1929, involved notes given in payment for the leases of a granite quarry. The notes were to be paid at stated intervals "out of the profits of the corporation." When suit was instituted upon the notes a stipulated statement of facts recognized an operating deficit of $44,000, but additional evidence demonstrated that operations to date and the discovery of a new and very valuable stone had caused the quarries greatly to appreciate in value. The plaintiff urged consideration of this factor in ascertaining profits. The courts reply was "The general rule seems to be that increase in the value of lands held by a corporation cannot be considered as profits, at least until such lands are sold and the profits actually realized." This court definitely excluded an increase in value by appreciation of assets from its determination of net profits.

In Wisconsin the state income tax law provided a tax on all dividends out of corporate earnings or profits since 1911. By statute in Wisconsin, as will be noted later, dividends may be declared out of appreciation of assets. In the case of *State* v. *Cary*[16] the question presented was whether dividends paid from appreciation were taxable. The holding was that dividends declared from the appreciation of assets were not dividends arising out of profits and therefore were not taxable, because "there are two kinds of dividends well known to it, namely dividends issued out of profits and dividends issued upon the increased value of corporate assets." The court evidently concluded that appreciation, unrealized by sale, did not constitute profit although by statute available for dividends. These two recent cases may be said to typify the current construction placed upon the term "profits," and point to the exclusion of appreciation as a basis for dividends in those states in which profit is the determining factor.

The statutory group consists of six states in which the language of the statute appears explicit enough either to include or to exclude appreciation as a basis for dividends. The states of New York, Vermont, and Wisconsin provide for the payment of either stock or cash dividends from appreciation of assets. The New York statute[17] after stipulating that dividends shall not impair capital, provides that capital stock is impaired "unless the *value of its assets* remaining after the payment of such a dividend shall be at least equal to the liabilities including capital stock." The case of *Hill* v. *International Products Company*[18] decided in New York in 1925 involved only indirectly the legitimacy of certain dividends, as it was a bill to rescind a contract for the purchase of stock because of fraud. One misrepresentation alleged was the payment of dividends without adequate surplus or net profits. It appeared that an estimated increase in the weight and number of cattle in certain South American herds was made by some one in the American office without actual weighing and counting. The court said "It should seem to me that this

[13] Goodnow v. Am. Writing Paper Co. 73 N.J.E. 692, 69A 1014, 1908.

[14] 44 A. 17, 1899. See also 54 Conn. 156, 5a. 851.

[15] 18 S. W. (2nd) 737, Texas.

[16] 191 Wis. 153, 210 N.W. 420, 1926.

[17] Kinneys Consolidated Laws of N.Y. Book 58, sec. 58.

[18] 220 N.Y.S. 711.

alleged increase in value of cattle not realized by actual sale of cattle is not an item to be taken into consideration." The decision may be justified because of the inaccurate method of estimating the increased number and weight but certainly no sound legal principles or theory of accounting would insist upon eliminating the natural growth and increase in numbers of cattle in ascertaining annual profits. The present statute definitely makes appreciation available for dividends.

The Vermont Statute[19] after making impairment of capital illegal provides "The *value* of the assets and the amount of the liabilities are to be determined by the directors." Wisconsin[20] provides that dividends may be paid out of "the net increase in the value of its property" and thus in language that is unmistakable makes unrealized appreciation available for dividends.

The Uniform Business Corporation Act as formulated by the Commissioners on Uniform Legislation has been adopted by the states of Idaho and Ohio. Although Ohio at its 1929 session of the legislature amended the dividend provisions slightly, it is in all respects similar to the original document. The pertinent provisions of the Uniform Act follow:[21]

"No corporation shall pay dividends

(1) in cash or property, except from the surplus of the aggregate of its assets over the aggregate of its liabilities, plus stated capital, after deducting from such aggregate of its assets the amount by which such aggregate was increased by unrealized appreciation in value or revaluation of fixed assets;

(2) in shares of the corporation except from the surplus of the aggregate of its assets over the aggregate of its liabilities, plus stated capital."

This statute further provides that appreciation is to be shown on the books as a separate item. In these two states, therefore, which have adopted the Uniform Act, appreciation is clearly made available for stock dividends, but cash or property dividends may not be predicated thereon. It is significant to note that the legal profession felt inclined in explicit language to eliminate cash dividends from appreciation. The state of Alabama also has a statute which makes appreciation available for stock dividends.[22]

In summarizing it is well to bear in mind (1) that all of the states have enacted legislation governing in a general way the declaration and payment of dividends and that the states fall naturally into three groups; (2) that the balance sheet group directs its attention to the balance sheet in testing the legality of dividends and is not constrained to use book figures when they differ from the actual value of the assets, implying rather than definitely holding, that appreciation is available for dividends, (3) that the profit-statement group definitely makes profits the basis of dividends, but in determining profits several of the states use the balance-sheet or single-entry method of arriving at profit and by express language in several instances appear willing to give weight to existing values in arriving at profit; while other states apply the double-entry method of ascertaining profits which eliminates appreciation as a basis of profit, the latter states perhaps representing the prevailing view; (4) that a decided tendency is noticeable to provide i statute explicitly for appreciation, all states having such legislation making appreciation available for stock dividends but evenly dividing on the subject of cash dividends, with a Uniform Corporation Act, destined in time to take its place among other Uniform Acts, definitely providing against the payment of cash dividends from unrealized appreciation.

COMMENTS BY HENRY RAND HATFIELD

"Obviously the issue turns upon the question of whether such appreciation is profit or not profit. If it is undoubted profit then it is clearly available for dividends."

This is not correct. There may be profit *not* available for dividends, as for instance profit not "arising from the business" to which dividends are limited in some states. Or it might be profit arising from the business yet, as is the case of part of the profit of National Banks, which is not available for dividends but must be put in surplus, or finally it may be profit but a sinking fund contract with bond holders may require that it be withheld to create the sinking fund.

[19] General Laws of Vermont, 1917, sec. 4439.
[20] Laws of Wis. 1925, ch. 898.
[21] Laws of Ohio, 1927, p. 25, sec. 38.
[22] Code of Alabama, 1923, sec. 6991.

Considerable hesitancy . . . . to adopt a concept of profits which would allow anything to slip into the calculation which later conditions might prove not a profit. If unrealized appreciation were accepted as a profit, a change in conditions which wiped out the increased values might easily lead to a constructive "dividend out of capital."

If you accept this any profit arising from sale of goods on account will have to be ruled out, until the accounts are all paid. Certainly accountants do not do that. And there could be no element of profit due to accrual of interest on bonds or notes receivable. Subsequent events do not affect profits at the time. Cf. Stringer's case (L.R. 4 Ch. 475).

In discussion on page 9 and elsewhere no reference is made to Ammonia Soda Co. v. Chamberlain. ([1918] 2 Ch. 226). Previous cases to the effect that appreciation may not be considered are given. It is not fair to omit this case which distinctly allows it.

In the absence of a real surplus basis, the stock dividend might lead the corporation into considerable financial embarrassment.

A cash dividend, or one paid in bonds might lead to financial embarrassment, but can a stock dividend do so? The stock carries with it no financial obligations.

COMMENTS BY JOHN R. WILDMAN

The controversy with respect to whether any and all profits are divisible is avoided if one accepts the principle that a closed transaction is necessary to the determination of profit. If there is no profit, there can be no dividend. Appreciation, as defined, may lay no claim to relationship with a closed transaction. Even less may that claim be made the basis for recognizing as profits, those increases which are regarded by some persons as arising from arbitrary revaluations. If there is no closed transaction, or transfer of title, there can be no profit.

Mr. Hatfield objects to citing an array of cases which support this view, and omitting the case of Ammonia Soda Company v. Chamberlain (1918) 1 ch. 266. The facts of that case as stated by Prosper Reiter in his Profits, Dividends and the Law (page 36) are as follows:

The Ammonia Soda Company was organized for the purpose of working as brine land, a tract with underlying beds of rock salt. A plant was erected, machinery installed, and operations commenced. During the first few years of operation a large deficit was accumulated, both because the operations themselves resulted in a trading loss, and because the profit and loss account was charged with reserves for depreciation of plant and machinery.

Finally, a profit for the year 1911 reduced the deficit from £19,000 to £13,000. At this time the discovery of additional brine deposits raised the value of the land. The directors wished to issue some preferred stock, and in order to make a good showing it was decided to credit the estimated appreciation to the profit and loss account, wipe out the deficit, and start paying dividends out of current profit and loss balances. When this was done, and a dividend paid, the directors were sued for having paid a dividend out of capital, contrary to the alleged inhibition of the Companies Act.

The decision favored the directors. One of the arguments of the court, quoting from Reiter (page 37), was "that unrealized appreciation is a legitimate credit to profit and loss account also follows from the fact that merchandise and accounts receivable are taken into account before realization."

Reiter's comment on the decision is: "It is submitted that Ammonia Soda Company v. Chamberlain stands for the following principle only: Accrued depreciation not taken care of by charges to profit and loss account need not be made good before distributing a current credit balance to the account, where it is counteracted by estimated appreciation in the value of other assets. The lengthy opinions of the various justices who decided the Ammonia Soda Company case contain many dicta which have been rather loosely cited by courts and text writers, and which therefore deserve discussion."

The survey report on appreciation is not concerned with the trust fund theory of capital investment. It is concerned with whether or not appreciation is available for dividends. The statement of facts pertaining to the Ammonia Soda Company case indicates, not that dividends were paid out of appreciation, but that appreciation was used to offset an impairment of capital. The dividends, as we understand the case, were declared out of current profits.

There is nothing irrational about treating appreciation as an addition to capital. There is no choice but to regard depreciation as a

deduction from capital, when the amount of any depreciation suffered is not recovered out of earnings. The harm does not lie in restoring losses resulting from depreciation by applying appreciation against them in the capital account. It does lie in treating appreciation as having created profit rather than capital.

SHOULD APPRECIATION BE BROUGHT INTO THE ACCOUNTS?

There could be little question of whether or not unrealized appreciation *could be* brought into the accounts. Double entry bookkeeping is such as elastic methodology, especially in permitting the use of "contra accounts" in order to make this and that "a matter of record," that merely finding a way to express some condition in the accounts would offer no problem, once the nature of the thing to be expressed has been decided. Since unrealized appreciation is never the result of an expenditure or of a closed transaction "in the market," it would never enter double entry accounts as a matter of course as would an actual disbursement. Consequently, if it were to be expressed in the accounts at all, it would be brought in by force, as it were, that is, in contra accounts. In fact, so elastic is double entry methodology that bookkeeping and cost accounting are being treated by not a few writers as a type of managerial statistics designed to seize and record any set of facts which the individual conceives to be of interest to the management—or to any one else. But the question of arrogating to bookkeeping certain quasi-statistical duties is not at issue here. Appreciation can be brought into accounts, if desired; but should it be brought in?

The answer to this question, however, will naturally depend upon a prior question, namely, is the entry of appreciation into the accounts essential to the purposes which men have in mind when they become interested in appreciation and essential to the real functions of accounting? This discussion, therefore, resolves itself into a consideration of the reasons which explain the interest business men have in appreciation.[1]

Men may become interested in appraisals because of the conviction that lax handling of the plant accounts in the past has left the assets materially understated. A consistent over-estimate of accruing depreciation would have had that effect; improper handling of repairs and betterments could likewise cause an understatement of the assets. There are several reasons which explain the existence of such improper plant accounting.

There may have been poor accounting methods in use which would permit assets no longer on hand to remain undetected on the books and depreciation to continue to accumulate; or setting-up costs, freight on equipment and the like, may have been omitted from the entries in asset accounts. Again it may have been merely conservatism which dictated a policy of charging betterments as repairs or of underestimating the service life of equipment. Or the practice might have been based upon a mistaken notion of the controllability of profit determination. If in profitable years capital items are deliberately charged as expense and in lean years are charged (perhaps along with some actual expenses) to asset accounts, so that the result of the statement of net profits may be arbitrarily controlled, this would constitute a gross misuse of accounting as a managerial instrument and would evidence either a wholly erroneous conception of the nature of net

[1] It is almost a consideration of the reasons for appraisals, since most of the arguments advanced are connected therewith. But it should be observed that "appraisal" is a narrower term than "appreciation," since the former usually covers only reproduction cost of structures and equipment. An appraisal in this sense is therefore a very incomplete estimate of appreciation. Being largely a matter of engineering computation, it gives effect primarily to current construction and equipment prices, and little or no consideration to socially caused appreciation.

profit, or a willful desire to conceal the truth.

"Profit" should be an idea, a concept; it does not exist because of accounting but because of trade. It exists regardless of bookkeeping; accounting merely tries to catch the fleeting image of the reality and picture it forth in figures for the eye to see. Deliberately then to falsify the colors is to twist an otherwise faithful art out of its proper sphere. No one can prevent depreciation from occurring by ignoring it in his records; and likewise, no one can create a profit where none exists by the simple expedient of charging some costs to an asset account. Although many operating and financial policies may sometimes be predicated upon nothing more than the wishes of a manager, accounting should not rest upon him; being more in the nature of a science, accounting possesses well established principles which aim at the nearest possible presentation of the truth and which cannot be considered matters of policy. Where practices such as the above have been indulged in, an "appreciation"—of a sort—may be found, and where found, should, of course, be made the basis of an adjustment. But this is not true appreciation.

There is another reason which might easily justify an adjustment, and that is a better present knowledge of the facts of the case in the light of experience. For example, after an asset has been used awhile, it may be quite evident that its service life was underestimated in setting the original depreciation rate, or that obsolescence is not developing as it might have done. Again, a large expenditure, say for reorganizing production methods, may prove to be very productive of lasting benefit although a good deal of skepticism in the beginning regarding its value caused the expenditure to be charged against revenue rather than to an asset. Such "new knowledge" growing out of the light of additional operating experience (and not out of price changes) might justify proper adjustments. The adjustment, however, would not be made because of any "appreciation," but to correct an error.

An examination by engineers would undoubtedly be of service in this connection in determining the extent of wear and tear and the effect of age and physical decay. Expert opinion would be helpful also in judging the approach or the unlikelihood of inadequacy and obsolescence. But it would seem that this expert engineering opinion would serve its purpose admirably by merely judging the extent of the useful life still remaining, without entering the field of value and price changes, or if these must be considered, of separately stating their effect upon the result. While it is recognized as difficult to separate the effect of omissions or incorrect accounting from the effect of changes in the prices of equipment and construction work, it is not impossible to do so in a sufficiently accurate manner as to be useful and enlightening.[3]

There are occasions when it becomes necessary to set a price upon an enterprise. The reason may be to help some one decide how much he will ask or to help another to decide how much to offer; or the reason may lie in condemnation proceedings or like litigation; or it may be that a merger of several concerns is proposed. All of these reasons for an appraisal rest upon the desire to find a basis for a price. An appraisal in this case would always be helpful—regardless of the drift of the price level—but it would not be the only factor considered, perhaps not even the principal factor.

The earning capacity of an enterprise for sale, purchase, condemnation, or merger would be a very important element, as would also, of course, the *expected* earning capacity under new management and the possible economies after reorganization. Thus the relative managerial abilities of purchaser and seller weigh heavily in the evaluation process. Often the necessity of

[3] A method is illustrated by David Himmelblau in *The Accounting Review* for June, 1928, p. 157.

one party or the other plays a strong part in the price, or the bargaining power of one or the other may be unusual. For example, the price of the Carnegie Steel Company to the United States Steel Corporation, when the latter was in the process of formation, was the result of neither plant value nor earning capacity, but rather it was due to the strategic position of Andrew Carnegie and the need the consolidation had for the control of his plant.[3]

In all cases of price setting for purchase or sale of plant, an appraisal is very helpful, almost necessary, but appraisal does not make the price nor does it even reflect the value. Price is the result of the interplay of all of the forces present, including relative necessities and contending strong personalities. When a deal is made the price emerges for the first time; the price at which the actual transaction takes place is the measure *at that time* of the value of the property. That is the only way value finds expression in realities. All else is conjecture and opinion.

When a value is thus "petrified," so to speak, by emerging in an actual transaction, it is, of course, a proper thing to enter into the accounts. But before the act takes place which "solidifies" it, value is fluid, perhaps gaseous were better; its dimensions are indeterminate, its very existence perhaps a mirage. At that stage value is no fit subject for entry in the accounts; in fact, there is no "value" as yet; one only thinks there *may be*. Until tested in the market, there is only surmise. Otherwise the situation would be like asking $20,000 for a house from a prospective buyer, and then setting that figure up as its value, because he said he would "think it over," although he never returned.

The case of refinancing or of reorganizing without a consolidation is not quite the same as a purchase and sale, for the reason that there is usually no real "test of the market" in the issuance of the new securities. Here again an appraisal is only part of the story—one factor among many. And again the earnings position is likely to play by far the stronger part.

If reorganization follows upon poor conditions, that situation arises through insufficient earnings and a resulting inability to pay current obligation. Values must then be scaled down, if definite properties have proven unproductive, and obligations lightened by rearranging the financial structure of securities. Thus, a fresh start is made with new proportions prevailing throughout. Bona fide adjustments made under these circumstances are, of course, proper to enter upon the accounts. But they are not likely to include appreciation.

However, with appraisals so readily at hand there is an occasional temptation to make use of revaluation to obliterate the effect of past losses or even deficits. Obviously, this sort of thing has no place in the accounts. And when it is submerged in a welter of refinancing and readjustment of security issues—perhaps along with the introduction of stock with no par value—the real facts are not only hard to read correctly but difficult to portray intelligibly as well. Thus it is easy to muddy the water.

If reorganization is proposed in good times, it no doubt looks toward getting more capital for new business purposes, and is therefore, inspired by profit earning conditions, present or prospective. An appraisal of reproduction values may be another factor for consideration by the financial advisers, but it neither stands alone nor in all likelihood constitutes the main consideration. The salability of the securities, that is, the condition of the money market, is likely to be a major factor in the final decision along with the expected earning power.

The value of the property is merely the security behind the obligations, the part to which recourse is had in the event of unex-

[3] cf. "The Distribution of Securities in the Formation of the United States Steel Corporation," by Prof. M. H. Robinson, in *Political Science Quarterly*, Vol. 30, No. 2.

pected financial storms and to which no one wants to come. But the margin of security is not the justification for the issue. The justification must lie in earnings, not in value. No one borrows merely because he has security, but because a productive opportunity exists; the security is the means by which the opportunity is grasped, not the cause. Likewise, no one lends merely because security is present and available, but because repayment is in prospect *without* recourse to the security pledged. The security is simply *safety*.

The value of the assets pledged is, then, the indication of the margin of security behind an issue and not the basis of the issue itself. In a bond prospectus a statement of the appraisal value is therefore entirely proper as showing the margin of safety, but it does not follow because of its usefulness here that an appreciation in value needs to be set up in the accounts or on the statement.

The issuance of refinancing bonds in no wise fixes the value of the property for record purposes. This situation is different from the bonds issued in a merger where the price for the properties, or the proportion in which securities are to be exchanged, is presumably the result of bargaining. In the latter case a price has been determined under conditions of give and take which are not unlike the competition of a market, and consequently a measure of value (a price) as of that moment has been expressed. It is a fit subject for record in the accounts; but in the former case, there is no conflict of opinion or interests, and no meeting of minds in a bargain. No price has been determined, only an opinion of probable value expressed by an appraiser, and consequently no value appears which is suitable to enter on the accounts.

It will perhaps be argued that it may be embarrassing if one has to state refinancing bonds in the balance sheet at more than the amount (cost) of the property pledged.[4] It would indeed be embarrassing, but it would show the undoubted fact that a considerable portion of the issue was secured by nothing more definite than a rise in prices of possible future plant. There are any number of embarrassing situations which are reflectable in the statements. Just such reflecting is the statements' primary function and whatever is interposed to blur the true reflection constitutes a misuse of accounting.

A very considerable use of appraisals is made in connection with placing insurance and adjusting fire losses. The purpose of insurance is to provide a means for placing the client as far as possible in the same position he occupied before the loss. This would necessarily mean the use of replacement or reproduction prices in order that property destroyed might be duplicated.

When a loss occurs there immediately arises the problem of agreeing upon an adjustment. The interests of the parties concerned are so opposed that often there is some lack of mutual confidence and good faith. Insurance adjusters know they have been defrauded upon occasion and are naturally conservative; clients are naturally biased in their own behalf and stand to lose heavily through stoppage of business even if full physical replacement ultimately takes place. Under these conditions any acceptable means of conclusively and fairly establishing the facts in the case is welcomed by both parties. A recent appraisal report affords just such a basis for agreement and when available became immediately useful in securing an intelligent and friendly adjustment.

All of which is well enough; few indeed could take exception to the usefulness of such a report. But it does not necessarily follow that the values computed in the report need be incorporated into the accounts. It would not strengthen the client's case with the insurance adjuster to have them entered. Where the report had been prepared by a reliable and reputable firm of professional appraisers, it would be

[4] Hull. "Appraisals—Their Treatment in Accounts," *The Accounting Review*, December, 1927.

a sufficient basis in itself. If then all of the expected benefits flow from the report, and no other benefits for adjustment purposes are added by incorporating the values in the accounts, it is difficult to see why appreciation need be brought into the accounts in connection with insurance. In fact, a knowledge of original cost (from the accounts) along with reproduction cost (from the report) would probably be a help to a just settlement. It could hardly be expected that revealing the original cost to a reputable insurance company would lead them to press for a settlement on that basis. It is hard to see, therefore, how a frank acknowledgement of the amount of "price appreciation" involved could prejudice either party's case.

There are then several important reasons why business men have an interest in the appreciation brought to light through appraisals, but not all of the circumstances justify entering the facts of the appraisal report upon the accounts. If incorrect accounting or ultra-conservative policies in the past have left in the accounts an untrue reflection of what really happened, there is ample justification not only for an appraisal but for an adjustment of the books as well.

When it became necessary for any reason to set a price upon an enterprise, an appraisal would be helpful as one of a number of factors in establishing the price but merely establishing a price—an offer—would not warrant entry upon the accounts. When an actual transaction occurs, however, whether for the sale of a company or for the merger of several, the price which is agreed upon by the parties most concerned is a proper item to enter in the accounts. The amount then has the seal of the market upon it, as it were; that price is a permanent and tangible embodiment in one figure of the various value-determining forces of the moment. This and no other is the sort of thing accounting exists to record.

Reorganizations (as distinct from mergers) often call for a rearrangement of the capital structure of a concern, and it is suggested that appreciated assets will support a larger body of securities. Appraisals have a place here in indicating the margin of safety behind the issues, but only on a liquidation basis, it should be noted. It is questionable, therefore, whether these circumstances furnish a proper occasion for entering increased asset values in the books since no transaction has taken place under the open influence of value-determining factors.

The other important factor behind appraisals—perhaps the most frequently mentioned factor—is insurance placement and loss adjustment. Here also appraisals have a very definite function, but nothing is gained by entering the appraisal facts upon the books.

The great variety of purposes for which appraisal companies have been engaged as well as some indication of the relative frequency of certain purposes is of interest in this connection. The following table is arranged from the results of a questionnaire sent out by a large appraisal company.[5]

PURPOSE OF APPRAISALS

		Replies
Insurance		2,303
Placing insurance	1,922	
Adjusting losses	381	
Finance		1,393
Refinancing	580	
Purchase and sale	374	
Reorganizing	255	
Merger	184	
Accounting		1,198
(No further specification)		
Tax matters		1,136
Federal	675	
Local	200	
State	191	
Inheritance	70	
Miscellaneous		345

[5] American Appraisal Company, *Clients Service Bulletin*, vol. III, No. 5, January, 1926.

COMMENTS BY HENRY RAND HATFIELD

> Appreciation would never enter double entry accounts as a matter of course as would an actual disbursement. Consequently if it were to be expressed in the accounts at all, it would be brought in by force, as it were, that is, in contra accounts. (p. 1, 1.10)

This is no more true of appreciation than of accrued interest. Either must be entered, not as recording an instant transaction but as the result of investigation and calculation. It is unclear what is meant by "using a contra account" here. Crediting appreciation to surplus is not using a contra account in any sense different from what happens when accrued interest is credited to Interest Revenue.

The definition of appraisal, on page 2, is much too narrow. It should cover any attempt to ascertain value by taking an inventory and estimating unit values. It should not be limited, as this seems to do, to an engineer's estimate of construction costs. And in the footnote the author almost implies that an appraisal is an estimate of appreciation, rather than an estimate of present value.

> The price at which the actual transaction takes place is the measure at that time of the value of the property.

But this price is recorded in the books and therefore the books do, at least then, record value. But this directly contradicts a previous statement:

> Accounting records, from the very nature of the case, cannot record value.

Further criticism may be made as follows: If price is a measure of value, it must be the measure of something already in existence. That is, it is in existence at the moment before the sale, for the price merely measures, and does not cause it. Why then assert so positively that appreciated value can NOT be recorded? It may be undesirable, in most cases; but is it so illogical or impossible as the author makes out?

> Before the act (sale) takes place which solidifies it, value is fluid, perhaps gaseous were better; its dimensions are indeterminate, its very existence, perhaps, a mirage. At that stage value is no fit subject for entry in the accounts; in fact there is no "value" as yet; one only thinks there may be.

The criticisms just given apply here. The statement is also contradictory to the statement:

> value exists in men's minds and is not inherent in any particular set of conditions.

which implies that value is not dependent on the condition of a sale, and the fact that one "thinks" it exists is no indication of its unrealness for value is always something in "men's minds."

The objection to recording appreciation because it is a vague estimate applies just as truly to depreciation. No one knows whether the estimated depreciation for a given year is correct or not, yet the showing of profits for that year depends, *tanto quanto*, on the estimate of depreciation. If all estimates are taboo, we can not have either an allowance for depreciation, nor one for bad and doubtful debts. Will accountants stand for this?

In discussing reorganization the author states:

> *Bona fide* adjustments made under these circumstances are, of course, proper to enter upon the accounts. But they are not likely to include appreciation.

Is he not giving his whole case away? If the entering of these adjustments is "of course" when they are *bona fide,* why may not *bona fide* adjustments of appreciation also be entered? The illustration given by the author of valuing a house at an exorbitant figure because some one said he would "think it over" is ruled out, for that was not a *"bona fide"* estimate.

> No one borrows merely because he has security; but because a productive opportunity exists; the security is the means by which the opportunity is grasped, not the cause.

This is not a very important statement, but if it means that borrowing by a corporation is always to make a productive investment, it is incorrect. It may borrow to pay a dividend. And in a sense it borrows then because it has so much assets. That is, the increased amount of assets constitutes profit, which is legally divisible. But, being in assets other than cash, the dividend is possible only by borrowing. Of course, this is legal. (Williams v. W.U.)

> In the latter case (merger) a price has been determined under conditions of give and take which

are not unlike the competition of a market, and consequently a measure of value (a price) as of that moment has been expressed. It is a fit subject for record in the accounts; but in the former case (appraisal) there is no conflict of opinion or interests and no meeting of minds in a bargain. No price has been determined . . . . and consequently no value appears which is suitable for entering upon the accounts.

The argument here is that when conditions which are *not unlike* the competition of a market a new value may be recorded without an actual sale of the particular article. By this token when one holds quoted securities an appreciation evidenced by quotations of recorded sales would justify entering the new value "upon the accounts." The author ought to admit, if he wishes to be consistent, that in such a case appreciation may be shown.

COMMENTS BY JOHN R. WILDMAN

We cannot agree with the conclusions of the survey that appreciation should not be recognized in the books of account. To take the position that closed transactions only are entitled to recognition is to narrow the function of accounting unduly and gainsay many of the well-settled practices.

In our opinion, every effort should be made to increase the usefulness of accounting by constantly seeking to find additional data to which expression may be given in financial statements; to refine the data and make it more understandable; to make accounting increasingly more serviceable as a basis for administration.

The objection to recognizing appreciation, is not that it has failed to obtain the seal of a closed transaction, but that owing to a wrong interpretation it will receive improper treatment in the accounts. Once it is understood and generally agreed that appreciation, or those increases which are improperly placed in the same category, may be regarded, if recognized at all, only as having increased the capital of an enterprise, there can be no objection to bringing appreciation into the accounts.

Modern business practice creates too many situations in which recognition must be given to relations which either are not related to, or have not reached the status of, a closed transaction. The practice of accruing, of using standard costs, and of budgeting are cases in point. One does not object to the use of these devices in connection with the general accounts, because they tend to give a more accurate basis for efficient administration. By the same token, one should not object to the introduction of appreciation, or appraisal, or even arbitrary estimates, if these matters are the subject of formal action on the part of corporation directors.

It were better policy to insist on the proper treatment of these matters when they are brought into the accounts than to object to their introduction.

HOW CAN APPRECIATION BE TREATED IN THE ACCOUNTS?

This part of the study of appreciation is concerned only with presenting a summary of the methods which have been proposed for handling appreciation in the accounts after it has been decided to place it there, and the methods suggested for presenting the facts in the statements. No attempt is made here to justify the placing of the appreciated values on the books in the first place or to originate new methods. Practice has met certain cases in which it seemed desirable for one reason or another to have appreciated values put into the accounts and attention is here directed to the methods which could be followed to accomplish this end.

To facilitate this study of method, six suggested methods of handling appreciation in the accounts will first be briefly reviewed. These six methods are those which are thought to be most clearly worked out by their respective authors.[1]

[1] The original source and authors of these methods are as follows:

1. "Treatment of Appreciation of Fixed Assets—In the Accounts and Balance-Sheet and for Income-Tax purposes," by Albert G. Moss, *Journal of Accountancy*, September, 1923, vol. XXXVI, No. 3.

In order to present the essence of the methods as briefly as possible, no attempt will be made to state the problems used by the various authors in discerning their methods. Only the journal entries with the exact account titles will be reproduced.

(1) *Journal of Accountancy*, September, 1923 (Moss).

(a)

Plant values as of December 31, 1919, over March 1, 1913, value	$540,000	
Reserve for depreciation of December 31, 1919, plant value increase		$194,400
Surplus arising from revaluation of plant as of December 31, 1919		345,600

To record the excess of the December 31, 1919, plant value over the March 1, 1913, value and the accrued depreciation thereon from January 1, 1911, to December 31, 1919.

In the above case the property (plant) was originally acquired January 1, 1911, through construction. A previous appraisal was made as of March 1, 1913, in accordance with the Income Tax law. Since this study is not primarily concerned with accounting for tax purposes, the tax feature of the method is here omitted.

The following entries dispose of the annual depreciation charge and other periodic adjustments:

(b)

Depreciation on cost of plant	$ 12,000	
Depreciation on March 1, 1913, value	2,400	
Surplus arising from revaluation of plant as of December 31, 1919	21,600	
Reserve for depreciation on cost of plant		$ 12,000
Reserve for depreciation on March 1, 1913, increase		2,400
Reserve for depreciation on December 31, 1919, increase		21,600

To record depreciation for the year 1920.

(c)

Surplus arising from revaluation of plant as of March 1, 1913	$ 2,400	
Earned surplus		$ 2,400

To record depreciation of plant as of March 1, 1913, realized by depreciation charged to operations for 1920.

(2) *Harvard Business Review*—April, 1926:

(a)

Sawmill properties	$500,000	
Capital surplus from appraisal		$500,000

To record the increase in property values as per appraisal:

Replacement value—new	$1,500,000
Book value—cost	1,000,000
Capital surplus	$ 500,000

(b)

Capital surplus from appraisal	$200,000	
Reserve for depreciation		$200,000

To record 8 years' depreciation of 5% per annum on the increase of $500,000 in the replacement value of the sawmills.

(c)

Depreciation	$ 50,000	
Capital surplus from appraisal	25,000	
Reserve for depreciation		$ 75,000

Annual entry to record depreciation and adjustments.

(3) American Appraisal Company pamphlet:

(a)

Fixed assets	$300,000	
Unearned appreciation		$260,000
Valuation depreciation adjustment		40,000

To record the facts of the appraisal.

(b)

Profit and loss	$ 70,000	
Cost depreciation and reserve		$ 40,000
Valuation depreciation and adjustment		30,000

To record annual adjustments.

(c)

Unearned appreciation	$ 30,000	
Earned appreciation		$ 30,000

To record earned and unearned adjustments.

(4) *The Accounting Review*—December, 1927 (Hull):

Hull has outlined two methods for handling appreciation on the books. The first method does not charge operations with de-

2. "Accounting for Appreciation of Fixed Assets," *Harvard Business Review*, 4:357-61, April, 1926.

3. "Accounting for Value as well as Original Cost," pamphlet published by the American Appraisal Company.

4 and 5. "Appraisals—Their treatment in Accounts," by G. L. Hull, *The Accounting Review*, December, 1927.

6. "Treatment of Appreciation," by George E. Bennett, *Journal of Accountancy*, June, 1928, vol. XLV, No. 6.

preciation based upon current values but upon original cost values. He says that this method is purely a balance sheet record.

(a)

Fixed assets—appreciation	$200,000	
Allowance for depreciation		$ 80,000
Reserve for appreciation in value		120,000
To record the facts of the appraisal.		
Depreciation (cost)	$ 50,000	
Reserve for appreciation in value	20,000	
Allowance for depreciation		$ 70,000
To record the annual credit for depreciation.		

(5) The second method reflects current values in the operating cost accounts as well as in the balance sheet.

(a)

Fixed assets	$200,000	
Capital adjustment — revaluation of fixed assets		$120,000
Depreciation reserve adjustment—appraisal value		80,000
To record Appreciated Values.		

(b)

Depreciation expense	$ 70,000	
Depreciation reserve—cost		$ 50,000
Depreciation reserve adjustment—appraisal value		20,000
To record the facts of the appraisal.		

(6) *Journal of Accountancy*—June, 1928 (Bennett):

(a)

Appreciation in fixed asset value	$325,000	
Unrealized appreciation		$295,000
Appraisal depreciation adjustment		30,000
To record the facts of the appraisal.		

(b)

Depreciation expense (cost)	$ 35,000	
Reserve (allowance) for depreciation		$ 35,000
Unrealized appreciation returned	32,500	
Appraisal depreciation adjustment		32,500
Depreciation on reproduction less depreciation cost.		
Unrealized appreciation	$ 32,500	
Reserve for unrealized appreciation returned		$ 32,500
To adjust periodically the depreciation accounts.		

Of simpler ways of recognizing appreciation than the above, mention may be made of the use of footnotes accompanying the balance sheet. Such footnotes usually appear at the bottom of the balance sheet stating the fact that an appraisal had been made and giving the estimated present sound value of asset. This is perhaps the most conservative method in use.[2]

Another conservative method makes use of contra accounts. The journal entry to record the facts of the appraisal is:

Increase in Value of Blank Asset Account	$10,000	
Surplus Arising from Marking up the Value of the Bank Asset Account		$10,000

The $10,000 increase in the value of the asset account is the difference between present value and original cost of the specific asset and not the difference between replacement new and original. The result is merely an additional debit and credit on the Balance Sheet.

Periodically, the following entry would be made:

Surplus Arising from Marking up the Value of the Blank Asset Account	$1,000	
Replacement Reserve (10% per year)		$1,000

The result of this entry is merely to effect a change in the account titles. Under this method no consideration is given to the problem of depreciation on appreciated value. Since this is a conservative method of recognizing appreciation, it is argued that this method is sufficient, if the decision has been that depreciation taken on the appreciated value has no place in the accounts. This method produces no effect upon the income statement, although appreciated values are shown on the balance sheet.

It is quite noticeable in the more elaborate methods listed above that there is a lack of similarity in the terms and account titles used by the several writers. An examination reveals the fact that many of the accounts are of the same fundamental nature. For example, "Valuation Depreciation Adjustment" used by Hull is similar in nature to the account "Depreciation Reserve Adjustment—Appraisal Value" as

[2] D. C. Eggleston, "Auditing Procedure," p. 169.

used by the American Appraisal Company. It is evident that a comparison must eliminate such dissimilarities in terminology.

An analysis of the situation at the time the facts of appraisal are first entered upon the books (terminology aside) reveals the following possibilities. There must be either a debit to a separate asset account for the amount of the increase in value of the asset appraised (difference between replacement new and original cost), or an addition to the old asset account for the same amount. Accompanying this debit two credits are necessary. First, there must be a credit to record the amount of accrued depreciation on replacement new which is necessary to arrive at sound value. In other words, depreciation on the excess of replacement value over cost which is applicable to the period preceding the date of the appraisal is to be credited to Reserve for Depreciation, Allowance for Depreciation, or some similar account. For the second credit there are three possibilities. This credit may be (1) to surplus available for dividends, (2) to capital surplus (surplus not available for dividends), or (3) to a presumably non-surplus account (as Unrealized Appreciation). No case was found, however, where a credit was recommended to surplus available for dividends.

Having generalized the placing of the facts of the appraisal upon the books, the next step is to show the annual or periodic charges to operation for depreciation. It is evident that our journal entry debit will contain a charge based either upon original cost or upon replacement cost-new. The credit will contain either one or two reserve for depreciation accounts or some accounts similar to reserve for depreciation. The account titles used by Bennett illustrate this point. The two credit accounts in his illustration are "Reserve (allowance) for Depreciation" and "Appraisal Depreciation Adjustment." The first represents depreciation on original cost, while the latter represents depreciation on the excess of replacement new over original cost.

It is noticed that the credits together are equal to depreciation on replacement cost-new. If the debit is for depreciation on replacement cost-new, the entry is in balance. However, if we debit only for depreciation based on original cost, another debit is necessary to bring the sum of the debits up to the sum of the credits. This additional debit is a charge to Reserve for Appreciation in Value, Capital Surplus or whatever similar title was used in the entry setting up the appreciation. This peroidically reduced the special reserve or surplus item and increases the replacement reserve by a similar amount. Whenever profit and loss is charged with depreciation based upon replacement values, a portion of the Capital Surplus or Non-Surplus item, it is claimed, is converted from an *unearned* increment to an *earned* increment.

These brief generalizations of the essential features of the problem of recording appreciation lead up to further consideration of the respective methods mentioned.

In the entries outlined by Moss as necessary, a separate asset account is debited for the excess of replacement-new over cost. Therefore, the plant account in the ledger reflects original cost. He credits reserve for depreciation (special reserve account for depreciation on excess of replacement-new over cost) for the accrued depreciation and "Surplus arising from Revaluation," which is a capital surplus item. Periodically, he charges profit and loss with depreciation on cost and credits Reserve for Depreciation for a similar amount. He also reduces the capital surplus item by a debit to that account and increases Reserve for Depreciation (the special reserve for depreciation—called Reserve for Depreciation of December 31, 1919, plant value increase) for an amount to record depreciation on the appreciated value.

It will be noticed that two reserve accounts are in use. Moss says:

This procedure does not provide one dollar for replacements, but if the owners of the plant have taken the increased depreciation charge into account in fixing prices, and if the profits were thereby increased, good business policy demands that the amount of the increase in profits be transferred to a reserve for replacements and not distributed as dividends. . . . . At the end of each year, the net appraisal value of the property over cost and the surplus arising from revaluation of fixed assets would be reduced by the amount of the depreciation charge until such time as that part of the appreciation on the plant had been written off entirely.

The method outlined in the Harvard Business Review includes a debit which results in an addition to the amount in the asset account in the ledger. The credits are to Reserve for Depreciation (to record accrued depreciation on appreciated values) and to Capital Surplus from Appraisal. Under this method profit and loss is annually charged with depreciation on cost, while Reserve for Depreciation is credited with a similar amount. Also, a portion of the Capital Surplus (equivalent to depreciation on appreciated value) is transferred to Reserve for Depreciation at the same time.

The following statement is made in support of this procedure:

The Depreciation account thus records each year the portion of the actual investment in plant which is transferred to operating costs for the year. The Reserve for Depreciation account records the accrued depreciation to date of the appreciated book value of the property, and will at the end of the estimated life of the plant extinguish the total book value. The difference between the annual charge to Depreciation Expense and the annual credit to the Reserve for Depreciation will have been charged annually to the Capital Surplus from Appraisal account, thus finally extinguishing that account. . . . . When appreciation is to be recorded, care should be taken that the accounts involved do not tend to deceive. Thus, the surplus resulting from the mark-up should be segregated from the regular surplus account representing accumulated earnings, and should be set up in a separate account.

The following argument is stated in the same article in support of the theory of charging the fixed asset with the replacement value in excess of cost:

The accountants state that the result of the appraisers' estimate may properly be incorporated in the accounts in one of two ways, either of which is found in use but of which the latter alone gives a full record of the facts. The present balance in the Reserve for Depreciation may be closed into the Sawmill Properties account, which may then be charged \$300,000 to cover the appreciation in the net depreciated value of the mills, the offsetting credit going to an account for Capital Surplus from Appraisal. Or as an alternate the new replacement value of the property may be brought into the books through the Sawmill Properties account, at the same time increasing the Reserve for Depreciation to represent the total accrued on the increase value of 5 per cent annually for eight years. The latter method is recommended, since it follows the principle, now generally accepted by accounting authorities, that the fixed assets should be shown in the accounts at gross value, and reduced to net through the medium of the Reserve for Depreciation.

The following statement is made in connection with the theory of charging profit and loss with depreciation based upon cost:

The Accountants state, however, that the increase in the depreciation charge should not be taken into current manufacturing or operating costs. Only such an amount should be included under operations as measures the depreciation of the property at actual cost. Replacement values should be permitted to affect costs only when the property is actually replaced.

As the accountants point out, the fact that the particular assets actually in use cannot be replaced at their original cost, but only at considerably more, affects not the cost but rather the selling price of the present product. True cost can be obtained only by including as total depreciation the loss based on the original cost of the equipment. This, of course, does not mean that prices must be fixed on the

cost figures so determined. If the latter were done the customers would get the benefit of the use of low-cost plant at a time when the cost of a smilar plant had advanced considerably over the original cost of the plant in question. It is a matter of general business policy, not of accounting, whether the business man or the customer shall derive the advantage accruing from the purchase or construction of a plant at a time when prices were lower than they are now. Hence, although depreciation must be based upon original cost value in order to arrive at true costs of the product, there is no reason, so far as accounting principles are concerned, why an additional charge may not be added to costs in determining the selling price. Actual cost, however, is a fact not charged by the appreciation in the value of the fixed assets.[3]

The method presented by the American Appraisal Company uses a debit (an addition) to fixed assets offset by credits to a special Reserve for Depreciation (on appreciated values) and to Unearned Appreciation (a Non-Surplus account). Quoting from the pamphlet "Accounting for Value as well as Original Cost," in explanation of the use of Unearned Appreciation:

> Unearned Appreciation represents appreciation that has actually taken place through increase in values but which has not been earned except as the assets on which it is accumulated are exhausted. It is assumed that during the year $30,000 worth of such assets have been exhausted, that the depreciation on the appreciated value as well as the original cost has been charged into production, thus the $30,000 has been recovered through the sales price and earned through use. If $30,000 unearned appreciation has been recovered through sales, we decrease the Unearned Appreciation account by debiting it and credit Earned Appreciation where it may be kept separate from surplus and thus not be distributed as dividends. In reality it is a return of the value equivalent of property—capital, and if treated as such when the entire property, of which it represents a part, will have been exhausted, it will be available to replace that property.

[3] See also, Pinkerton, "Accounting for Surplus," pages 45-6.

Annually profit and loss will receive a charge for depreciation based upon replacement costs. The credits offsetting this debit are to two Reserve for Depreciation accounts—one reflecting depreciation on cost and the other depreciation on appreciated values. Also there is a transfer of a portion (equivalent to depreciation on appreciated value) of the non-surplus account (Unearned Appreciation) to another non-surplus account (Earned Appreciation). Earned Appreciation is similar to a Reserve for Replacement at Higher Costs or some other such title except that it is not appropriated from General Surplus.

In Hull's first method, he offers a choice of either debiting the fixed asset account or a special asset account for the amount of the excess of replacement cost-new over original cost. Excepting that Hull credits Reserve for Appreciation in Value (a non-surplus account) instead of a capital surplus account, the remainder of this method is in essence identical to those of Moss and Pinkerton.

Hull's second method is identical to that advocated by the American Appraisal Company except in terminology. The nature of the accounts is the same. The outstanding feature of these two methods lies in the fact that profit and loss is charged with depreciation based upon replacement cost-new.

Bennett's method consists of a charge to a separate asset account (Appreciation in Fixed Assets Value) and of credits to a non-surplus account (Unrealized Appreciation) for the amount of the net appreciation in value, and to a special reserve for depreciation account (Appraisal Depreciation Adjustment). Annually he charges profit and loss with depreciation based upon original cost and credits reserved for depreciation for a similar amount. Reproducing his other two annual entries, we have:

Unrealized appreciation returned	$ 32,500	
Appraisal depreciation adjustment		$ 32,500

Unrealized appreciation	32,500	
Reserve for unrealized appreciation returned		32,500

The two accounts, "Unrealized Appreciation Returned" and "Reserve for Unrealized Appreciation Returned" appeared to be contra accounts. Eliminating these the resulting debit and credit will reflect a transfer of a portion of "Unrealized Appreciation" (equivalent to depreciation on the appraised value) to "Appraisal Depreciation Adjustment" (a special reserve for depreciation account). In essence the only difference between Bennett's method and the others which base depreciation on original cost is that he uses two reserve for depreciation accounts instead of one. Like Hull (in his first method) Bennett credits a non-surplus account rather than capital surplus for the net appreciation.

Bennett is of the opinion that the accountant has failed to give enough thought to the credit to be made when setting the appraisal facts upon the books. The most common credit in the past was one to Surplus-Appraisal Valuation; or some such similar account which would be classified as capital surplus. He says:

> When the practice first started of writing up the value of fixed assets, accountants were almost unanimous in aggregating the offset to excess value in an account called surplus arising from revaluation. Then came no-par stock, stated capital, paid-in, initial and capital surplus complications, coupled with formidable legal opinions that accountants should mind their own business and not use such terms as earned surplus.
>
> Due largely to pressure from lawyers came the merger of carefully worded special surplus accounts into one surplus account. And, of course, when you have one surplus account, it is all available for dividends.[4]

This distinction seems to be a sound one. There does appear to be a distinct difference between Capital Surplus which includes paid-in surplus and capital gains, and a surplus (so-called) which arises from appreciation. Unearned Appreciation is believed to be a much better account title than Surplus Arising from Appreciation. This would tend to form a new section in the Net Worth section of the balance sheet, namely, the Appreciation section. We would have both earned and unearned appreciation appearing under this section.

The preceding pages have revealed but two basic methods of handling appreciation in the accounts, namely, the method which charges profit and loss with depreciation based upon replacement cost-new and that which charges profit and loss with depreciation based upon original cost. Any of the methods here analyzed can be classified under one of these two heads. The difference between the two is fundamentally one of the theory and therefore beyond the province of this section to consider. Within each of these two general classes the several suggested methods differ only in terminology, classification, and perhaps a few minor points in theory.

Of the several methods here summarized for handling appreciated values in the accounts, the first to be used and perhaps the most conservative was the balance-sheet footnote merely stating the facts of the appraisal. The theory back of this procedure is that cost should be the basis for balance sheet figures and that therefore there should be no entry in the accounts actually setting up the appreciated values. Mention is made of the facts in a footnote, however, so that the reader may be informed even though formal entries are not made. The balance-sheet footnote usually appears at the bottom of the statement. However, sometimes replacement value as derived by appraisals is either placed in parentheses after the asset account title or as a note in small type below the asset account title in the statement.

As a substitute for the footnote, the appreciated values might be reflected in the balance sheet by a debit and credit with the amounts entered short. Although this

[4] See also Montgomery, R. H., Accountants' Limitations. *The Journal of Accountancy*, October, 1927, pages 258-259.

method has not been used in any of the discussions referred to here, it may be illustrated in the following part of a balance sheet:

Fixed Assets:		
Land		$400,000
Building and site		300,000
Increase in value of building due to appreciation	$ 50,000	
Machinery		150,000
Total fixed assets		$850,000

A similar procedure would be followed out on the credit side of the balance sheet.

In some cases, however, preference is expressed for bringing appreciated values into the balance sheet totals. In this event, either the replacement values are stated in one amount with an explanation in the account title or parenthesized after the title, or the appreciated value is added to the original cost value of the asset, and the sum is carried to the total column. The credit is usually found in the Surplus section of Net Worth and earmarked in such a way that one would hardly overlook the fact that it was a surplus arising from appreciation. If it is treated as a non-surplus account, it will appear in the net worth section but not labeled surplus.

The great objection to inserting the appreciated values into the balance sheet totals is that if the profit and loss statement does not also include these values (depreciation based upon appraised value), the two statements will not be comparable. On the other hand, those who would include the appraised value in the statements claim that it is the most efficient and logical way of building up reserves and funds to provide for replacements at higher prices.

A compromise is suggested in Bennett's presentation where several offsetting appreciation adjustment accounts are placed on both sides *below* the ruled totals of the balance sheet proper and included in a second set of balance sheet totals. In the Income Statement, a figure for unrealized appreciation is deducted from the net profit on a cost basis to show a remainder of undivided net profits for the year on a value base. This, of course, is equivalent to setting aside a "Replacement Reserve" out of net income and the balance sheet treatment is equivalent to an elaborated footnote—which is probably about the way most accountants would prefer to handle the situation growing out of rising cost levels if pressure did not lead them away from such simple and clear cut methods.

It is evident from this study of the various methods of handling appreciation in the accounts that the chief point of difference is concerned with the question of whether Profit and Loss shall be charged with depreciation based upon original cost or upon reproduction cost. It is admitted that some interesting and perhaps important differences arise in the terminology used, but it should be possible for an agreement to be reached among accountants in this respect. Some methods go into more detail than others, as in the case of the use of two reserve for depreciation accounts or but one. The result may be a worthy one, but the end accomplished remains the same. Likewise, the method of presenting the facts resulting from an appraisal offers distinct and interesting variations, but this can hardly be picked out as a theoretical basis for ε difference between the two chief methods of handling appreciation in the accounts. However, it may be said that appreciation methodology is fundamentally similar in all cases except with regard to the one question of theory concerning the costing problem of the proper function of depreciation.

COMMENTS BY ANDREW BARR, JR.

In an examination of published reports of corporations, one method was revealed which has not been considered. One large corporation seems to have made an entry debiting sundry fixed assets and crediting goodwill. Since this was a balance sheet certified by one of our most prominent firms, the auditors pro-

tected themselves from criticism by making a complete explanation in the face of the balance sheet.

Any criticism that could be launched against the six methods summarized here will naturally fall on their respective authors rather than on the compiler of the report being examined, except in one instance. Mr. Hull's second method does not seem to be reported fully. A third entry under this method is to debit "Capital Adjustment-Revaluation of Fixed Assets" and to credit "Reserve to Provide for Higher Costs of Replacement."

A complete reading of Mr. Hull's explanation of this entry is necessary before we can be satisfied that it is correct. As it stands, the current year's profits are left understated by the amount of depreciation taken on appreciation. To comply with the definition propounded in this study, as well as to conform to the income tax laws, the credit should have been to profit and loss and then, if you like, transferrred to a reserve. This Mr. Hull suggests as an optional method, presumably to appease those of us who do not subscribe wholeheartedly to the idea of recording appreciation anyway.

Also, in connection with this method, we might be justified in asking why the simple and understandable titles used in the first of Mr. Hull's methods could not have been used as well in his second.

The outstanding feature of the entries for recording appreciation on the books is undoubtedly that of the utter lack of uniformity in account titles. In nearly every set of journal entries proposed, titles have been used which would be almost entirely unintelligible to the layman and in the case of those proposed by Bennett not entirely clear to the accountant. This is just another instance where accountants might at least apply the rule of using a terminology understandable to those who are to read their reports.

Where only a balance sheet change is made and depreciation on appreciation is not permitted to enter into the operating accounts, the titles used are acceptable for the most part. If this is all that is desired, would it not be better to follow the most conservative practice and show appraisal values in parentheses in the balance sheet the same as we do for market value of securities when we find it desirable to give this information, or in footnotes, rather than bother with formal book entries?

The following series of entries is offered as a composite of the suggested methods, with the idea of meeting most, if not all, of the criticisms that have been made against the terminology used. The series, must be separated into two cases, first, a set of entries for booking appreciation where it is desired to have it affect the balance sheet only and, second, a set for use where it is desired to bring depreciation on appraised values into the operating accounts.

The account titles suggested by Moss (method one of the study), although long, seem least subject to misinterpretation by the layman and for that reason, will be followed except for minor changes.

CASE I—Appreciation to affect the balance sheet only.

(a)

Plant values as of December 31, 1919 over March 1, 1913, value	$540,000	
Reserve for depreciation of December 31, 1919, plant value increase		$194,400
Unrealized appreciation arising from revaluation of plant as of December 31, 1919		345,600

To record the excess of the December 31, 1919 plant value over the March 1, 1913 value and the accrued appreciation thereon from January 1, 1911 to December 31, 1919.

(b)

Depreciation on cost of plant	$ 12,000	
Depreciation on March 1, 1913, increase	2,400	
Unrealized appreciation arising from revaluation of plant as of December 31, 1919	21,600	
Reserve for depreciation on cost of plant		$ 12,000
Reserve for depreciation on March 1, 1913, increase		2,400
Reserve for depreciation on December 31, 1919, increase		21,600

To record depreciation for the year 1920.

(c)

Unrealized appreciation arising from revaluation of plant as of March 1, 1913	$ 2,400	
Earned surplus		$ 2,400

To record appreciation of plant as of March 1, 1913, realized by depreciation charged to operations for 1920.

CASE II—Appreciation to affect both balance sheet and profit and loss statement.

(a)

The entry to record the appreciation as revealed by the appraisal will be the same as in Case I.

(b)

Depreciation on cost of plant	$ 12,000	
Depreciation on March 1, 1913, increase	2,400	
Depreciation on December 31, 1919, increase	21,600	
Reserve for depreciation on cost of plant		$ 12,000
Reserve for depreciation on March 1, 1913, increase		2,400
Reserve for depreciation on December 31, 1919, increase		21,600

To record depreciation for the year 1920.

(c)

Unrealized appreciation arising from revaluation of plant as of March 1, 1913	$ 2,400	
Unrealized appreciation arising from revaluation of plant as of December 31, 1919	21,600	
Earned surplus		$ 24,000

To record appreciation of plant realized by depreciation charged to operations for 1920.

(d)

Earned surplus	$ 24,000	
Reserve for replacements		$ 24,000

To record appropriation of realized appreciation in surplus to a replacement reserve in order to withhold this amount from distribution as dividends.

The entries given above should serve if we are booking the results of a plant appraisal. A plant appraisal as prepared in practice can reflect only two general conditions: first, misstatement of asset values due to errors in analysis of expenditures and in rates of depreciation; second, change in values due to changing prices. The entries given are designed to reflect only the change in prices as we may assume that changes required by the first cause have been cared for in other entries.

If appreciation means increase in replacement cost, we would be justified in bringing it into the books by means of the series of entries in case two, where we admit that our object is to charge current operations with its proportion of present replacement cost of the property with the end in view of recovering in that way an amount necessary to replace the asset when retired. This object cannot be fulfilled if dividends are based on profits before setting aside the replacement reserve as shown in the entry (d) as this is the amount by which comparative profits are overstated due to the change in price levels reflected in plant values.

To be of any service, appreciation of this type should be recorded at least once a year and more frequently, in periods of rapidly changing prices, and should be recorded whether the value increases or decreases as the admitted purpose of such appraisals must be to form a basis for providing for replacement when the asset is retired from service.

Such seems to be the general idea expressed by T. O. Yntema in the ACCOUNTING REVIEW of December, 1925, and of Dr. Scott in December, 1929.

This would be all very good if we usually replaced exactly the same article which we retire. I doubt if this is done one time in a hundred for new machines with greater capacity to produce at lower unit costs are constantly taking the place of old. In the face of such changes in the industrial world, why should we build up carefully calculated replacement reserves based on index numbers of doubtful dependability? Would it not be better to subscribe to the propositions that others have made before, and let the directors do the guessing and appropriate surplus for replacement reserves in the light of all known facts and for us as accountants to write down the historical cost as best we may, depending on the estimate of service expected from the assets at the time of purchase revised from time to time, if need be, to absorb the money outlay by the time the asset is scrapped.

This subject of appreciation has been discussed in these meetings for at least the last nine years and so far as can be determined from the annual reports, the majority opinion is about the same now as expressed by Mr. Wildman last year and by Professor Scovill in 1921. That opinion seems to be that we should not enter appreciation on the books. This opinion seems to be forced upon most accountants from a horror of showing appraised values in the balance sheet and the effect these have on the policy of directors in declaring dividends. The realization of this appreciation is so problematical that the footnote treatment seems the best.

But we have not met the requirements of the definition proposed in the study at hand. Ap-

preciation as defined therein excludes the effect of changing price levels and attributes true appreciation to a newly discovered financial productiveness. It is admitted that appreciation as here defined is similar to goodwill. If so, how can it be associated with any particular asset and therefore if not capable of being applied to the assets, how can any of the proposed journal entries be used to record it? Obviously, they cannot.

We have been told many times that goodwill should not be brought on to the books unless purchased. It seems that the only way to determine the amount of appreciation as here defined would be by the same methods used in determining the amount of goodwill. If that is true, the only way to record it truthfully would seem to be to debit goodwill and credit unrealized appreciation. This entry would be followed by charging off the goodwill to operations and transferring the unrealized appreciation to earned surplus as it would be a true earned surplus for this newly found financial productivity would be reflected in increased profits. The profits for any year, however, would be the same whether the appreciation had been taken up or not.

The logical conclusion, then, is that there can be no ascertainable appreciation of specific assets as appreciation has been defined in this study and therefore no entries should be made on the books or anywhere else.

COMMENTS BY JOHN R. WILDMAN

The time will be long undoubtedly before pseudo-appreciation will be differentiated from true appreciation. Perhaps the two never will be treated differently in the accounts. Whether or not they are is immaterial, so long as the increase on the credit side is kept out of earned surplus.

In the first instance, appreciation, or any arbitrary increases so described, whether properly or improperly, should be credited, at least, to an account which characterizes the increase as unrealized or unearned. The American Institute of Accountants' Committee on Earned Surplus, tentatively, has called it "Revaluation Surplus." Perhaps ultimately it will be described as "Capital Attributed to Appreciation."

The more one studies the subject, the more one becomes convinced, it seems, that the increment imputed to appreciation is in the nature of capital; not surplus. The term "surplus" is a misnomer and, therefore, should not be used. "Capital Arising from Revaluation," might serve to describe the increment properly. The term would be equally appropriate in the cases of increased asset values derived from appraisals based on either exchangeability, or higher price levels. "Capital Attributed to Appreciation," would fit better the true increment. It would be scarcely broad enough to fit other cases.

IS APPRECIATION A DEPRECIATING ELEMENT?

When for any reason appreciation is considered to be present and it is decided to adjust the books accordingly, a problem immediately appears regarding the subsequent treatment of the injected values.

At first thought it might seem desirable to consider the capital surplus as a permanent adjunct to capital, just as one would like to treat premiums on capital stock. This would be perfectly natural in a proprietor's account, but the situation loses its naturalness when associated with arbitrary par in a corporation and even more so with no-par stock, although logically no-par stock would seem to be much the closer to the simple proprietor's account. To most people, and probably to most courts, all "surplus" would look very much alike and consequently seem to be distributable. It is therefore hard to decide to leave a capital surplus undisturbed. Nor can an appreciation debit account be left permanently on the record; it is inseparable from the specific physical assets concerned and must of necessity expire with them. There is therefore the urge to dispose of the debit also in some way or other.

Perhaps the simplest way to do this would be the periodical reversal of a part of the accounts concerned; if Appreciation account had been debited and Capital Surplus

credited, this periodical entry would be a debit to Capital Surplus and a credit to Appreciation account. This has the obvious merit of expressing the facts clearly without giving rise to any complications. But like many other simple expedients it is considered inadequate by some. Its very simplicity militates against it; it does not accomplish the avowed purpose—as some writers view it—of recovering replacement cost out of operations; it merely sets up contra accounts and then reverses them little by little. The views concerning the recovery of replacement values will receive further consideration presently.

Another possible way of disposing of the values set up in bringing appreciation into the books would be to use the capital surplus as the basis of a stock dividend. This method has much to commend it, if appreciation is real and permanent and if earning power can be maintained. But, obviously, to justify this treatment appreciation would have to be more than a mere increase in the reproduction prices of plant and equipment. There would have to be at least a demonstrable "social increment" quite beyond the effect of replacement prices. If these conditions were present, however, there would be no need for amortizing the debit entry because the value would be as permanent as the business and not associated with some expiring asset. For real appreciation—that founded upon social and industrial progress and not merely on shifting price levels—the stock dividend method is probably the most logical treatment even though it would simply amount to a thinning out of the stockholders' equity.

The above consideration places real appreciation practically upon the same ground as good-will. After all, that is what good-will in a large part consists of—the results of social progress; only in part is the increased sales value of a business due to the skill, personality, and good name of the founders. The sooner appreciation is placed firmly in the same plane with good-will and divorced from all relation to replacement cost price levels, the sooner will its treatment be rationalized.

The method of disposing of appreciation which still remains to be considered proposes to transfer periodically a portion of "Capital Surplus from Appreciation" to an "Earned Surplus" or to a "Replacement Reserve" as fast as the Appreciation debit is periodically absorbed into operating costs like depreciation on plant is absorbed. The consideration of this proposal will occupy the rest of the present section.

It should be noted first of all that this treatment of appreciation in the books is not usually suggested primarily for the purpose of gradually clearing the accounts of appreciation, but that appreciation is brought into the accounts for the purpose of affording the means of recovering, automatically as it were, the replacement cost of plant charges to operations. *The object sought is not primarily the disposition of appreciated values but to establish a method for building up automatically the equivalent of replacement reserves.* With this objective established it becomes necessary to support it with a theory of depreciation which does not clash with the objective and the all-but-abandoned theory that depreciation is a true reserve is drawn upon for the purpose.

The issue, then, is primarily the question of what is the true function of depreciation? Is depreciation a means of maintaining physical capital or is it a means of spreading past cost over the product or service produced? If it is the latter, then the principal foundation is lost for bringing the amortization of appreciation into operating costs, and when that can no longer logically be done there is very little reason left for bringing appreciation into the accounts at all.

Long before the principle reached into the consciousness of business, economists clearly saw[1] that the continuation of pro-

[1] The Wealth of Nations appeared in 1776, and Adam Smith, the author, was fully alive to the

duction required the recovery from consumers of all advances made for labor and materials, and a sum for the maintenance of the "stock" (capital fund). When the relationship between a corporation and its creditors was finally worked out,[2] it was evident that the maintenance intact of the capital fund was an essential accompaniment of the limited liability of stockholders. This meant that dividends paid regardless of depreciation might easily be dividends out of capital and thus a personal liability of the directors. There was then this direct legal incentive to the recognition of depreciation in addition to the theory side as expressed by the economists.

But with the spread of industrialism from the middle of the 19th century onward and the growth of cost accounting a little later, the need for the inclusion of depreciation gained more and more recognition. The principal industrial (or managerial) problem still lies in costs; in the long run, outside conditions govern final selling prices, but an enterprise, for the most part, has a control over its own production costs. Consequently, the maintenance of a profitable margin is very largely a matter of close attention to cost. The manager must know when it is no longer profitable to carry a certain line or produce certain goods, and to do this he must use all of his ingenuity to associate with specific income the full cost of producing *that income*. No other principle is a safe expedient or a reliable guide. When there is joined to this principle the concept of fixed assets as "deferred expenses of production"—and no other conception seems possible for instruments which exhaust themselves solely for production—then the necessity for the manufacturer to view depreciation as a cost is clearly revealed.

It is an indispensable condition for the continuity of business that the investment be not frittered away, and that the fixed plant be not worn out for the benefit of final consumers without placing the burden on them. It is likewise an unescapable consequence of limited liability corporations that provision should be made to give protection to the creditors. And finally, the association of full cost with the income produced by that cost is evidently very necessary for good management.

Such considerations as these inevitably produce a cost concept of depreciation. Under industrial cost accounting, the earliest working idea of depreciation (that is as a reservation of profits—when there are any) has to be abandoned. From the standpoint of industry, depreciation is irrevocably a cost[3] and therefore is a means of spreading a past expenditure over the production to which it gives rise and not a means of replacing expired physical units.

With the manufacturer there is no alternative but to maintain his investment intact by passing the burden on to the consumer through the use of depreciation as a cost. With a government, however, the situation is quite different. The contrast is striking. For a government the expenditures determine the income and not the reverse, as is the case with private business. There is no occasion then for depreciation entering governmental accounts. Through its sovereignty and its legislative powers, government has complete control over its funds and properties, it is under no necessity to maintain an original investment intact. In fact, it is doubtful whether it is correct usage to say a government has made an investment; the distinction between a capital expenditure and an expense is very much more vague for a government because very

necessity for keeping industry from being weakened by the failure to maintain the capital invested in its instruments of production.

[2] In 1825 Justice Storey gave clear expression to the so-called trust fund doctrine of capital stock in the case of Wood vs. Dummer, 3 Mason 308.

[3] When a rising vote was called in a meeting of the National Association of Cost Accountants upon the question of depreciation on a cost or a replacement basis, a great majority voted for the cost basis, and only a few for the replacement basis. National Association of Cos' Accountants Year Book, 1923, p. 201.

little of either class of disbursement is made for the purpose of earning a return. Both classes of expenditures are made in the public service and for the benefit of the state or nation as a whole. The service and not any expected financial return is the justification for both.

Under these conditions there is no managerial problem of associating income produced with its cost of producing, in fact, there is no income in a sense which is comparable to industry. As a result there is no need for recognizing depreciation in governmental accounting, and there is neither a cost-theory of depreciation's function nor a replacement-theory of the function. Replacement to a government is merely another expenditure out of its controllable, inflowing funds (they are not really income); replacement is not different from an expenditure upon an entirely new project. A government, therefore, has no need to recognize depreciation as a cost or otherwise.

But lying between private enterprise on the one hand, subject as it is to the conditions imposed by competition, and government on the other, practically free from outside control, there is the public utility company which partakes somewhat of the nature of both the other two institutions. The problem of depreciation for the public utility, therefore, is likely to be somewhat different from that encountered by both of the others.

Utility company profit is in the final analysis controllable from the income side. Rates being set by a commission's fiat instead of by a competitive market means that income can be arbitrarily increased as operating costs go up. To the extent that this is possible the utility company is like a government, i.e., not under the necessity of considering depreciation as a cost in order to protect the capital fund and stay in business. On the other hand, this control of rates also means that rates which are fixed too low may be construed as confiscation—converting the investor's property to the benefit of the public (service consumers) without due compensation to the investor. Such considerations as these undoubtedly underlie the tendency of the utility companies and the courts to accept a replacement conception of the function of depreciation. But it should be noted that that view is not necessary to accomplish the purpose in mind.

It should be observed that it is quite different to hold that rates for service (i.e., selling prices) should be sufficient to maintain the physical plant and yield a fair return to the investor and to hold that it is the function of depreciation accounting to replace the plant units. The object is proper enough, but is the method the necessary one ?

It seems to be an accepted principle of American business to finance growth very largely through reinvested earnings. This means that customer charges have been large enough to permit a surplus to be laid aside which provides a fund for expansion. No objection has been raised to this practice, indeed, it is generally considered evidence of good management and sound finance. Consequently, utilities are entitled to rates which will enable them to do likewise.

But private enterprise does not use *depreciation charges* as the means of building up reserves which permit them to replace physical units even at advanced prices. Depreciation is spread as a cost; the credit created by the depreciation entry is neither a part of surplus nor a true reserve, but is merely an adjunct to the asset account concerned. The credit account thus created as in fact the *expired portion* of the asset and not surplus at all. Private enterprise builds up a real surplus of retained profits and it is this which is available for absorbing the excess of replacement cost over original cost when necessary. Ear-marked reserves of real surplus may even be established for this specific purpose .

It has not been necessary for private enterprise to revert to the earliest conception

of depreciation as a reservation of surplus in order to be able to live and have its being under a long period of rising prices. The utilities and the courts, however, seem to lean toward the old idea. One is inclined to wonder if it is expediency—and a rising price level—or if it is merely the persistence of the early and inaccurate idea of depreciation, which accounts for this tendency to regard depreciation as a surplus reserve rather than as the expiration of an asset; and to wonder if there is anything to prevent rates being granted which would return the expiration (wear and tear) of plant and other costs, and, after providing a fair return to stockholders, leave an ample margin accumulating which would provide reinvestment capital or replacement funds in the same way as manufacturing industry. Would an accumulation of surplus available for reinvestment in extending the plant be any more a cause for apprehension in an electric light company than in a manufacturing corporation?

The argument would seem to suggest that the utility company could apply the ear-marked surplus reserve method as well as private industry and thus hold to a conception of depreciation consistent with manufacturing. But the development has, for whatever reason, been the other way, and because of the quasi-public characteristic of utilities, the lack of competition, and the presence of commission controlled income, a different view of depreciation may perhaps be acceptable (or excusable) for utilities. In any event, it probably would be too much to expect the firmly intrenched precedent to be changed at this late date.

But even though there may be reasons for using the replacement concept of depreciation for public utilities, it by no means follows that their practice can be taken as precedent for a similar view of depreciation in private manufacturing enterprises. The two institutions are quite too far apart for that. But that is just what may happen, if it is not already being urged. The usefulness of appraisals may be quite evident wherever an advancing price level combines with a replacement theory of depreciation (as in a utility seeking a rate base), but the introduction of appraised appreciation into a situation where only a cost theory of depreciation is justifiable (as in a manufacturing company) is likely to distort things more than it can clarify.

Manufacturing industry has the same managerial problem as utilities have of securing sufficient earnings, especially in times of rising prices, to maintain physical capacity, but manufacturing *should hold consistently* to a cost theory of depreciation for two reasons: First, because it does not have the special conditions of income and expense which are present in the utility company, and second, because management should not yield its judgment-making prerogatives to routine accounting procedure.

In connection with this last point it has been urged that setting prices is a difficult matter and that because the management should be given all the help possible, accounting should *make* the cost of production include replacement charges. The same argument can be advanced in favor of charging into the cost of production a theoretical interest on capital investment and in favor of using "normal" burden rates to prevent this effect of varying volume of production from being reflected in the production costs. These suggestions seem to rest upon the theory that the figures should reflect not the actual outlays and expirations incurred because of production, but rather to show a managerial idea of what cost might be or ought to be in order that the simple addition of a percentage of profit would produce a price which the market would accept. But it is submitted that this is practically equivalent to giving over to accounting rather than management the function of setting prices.

It may be doubted whether double-entry bookkeeping should be stretched to include all of the calculations which management may need, and whether there would not be

the danger of relying so exclusively upon the results of accounting as to discourage "managerial figuring"—those independent computations, estimates and "suppositional cases" which constitute much of the raw material for forming executive judgements.[4]

It probably is not too much to say that the essential purpose of accounting is the determination of costs and net income, and that the balance sheet is only incidental to this purpose, although the exigencies of business on credit have made the latter statement seem much the more important. On the record side, accounting exists to preserve the facts about what happens; and therefore the double entry balance sheet has always been a residual after the essential accounting process (net income computation) is completed—it is the "balance forward," so to speak, the deferred charges to subsequent periods.

But such a balance sheet is unusual today. A certification "according to the books" has fallen into disfavor—probably at first because earlier conditions of stock-watering consolidations and a long period of falling prices made book figures seem an overstatement. Now, after a long period of rising prices, a balance sheet "according to the books" is still unacceptable, but now because it seems an understatement. This inevitable failure of double entry to produce a "value-statement," however, should neither destroy the usefulness of accounting as an administrative instrument nor lead us into a perversion of accounting's function by trying to make it reflect value.

Holding to cost, some one has said, will take more opinion and estimate out of financial statements and substitute more desirable facts than valuation will. Imperfect as cost-facts may be they are closer to perfection than value-opinions can be. And those who read financial statements may safely be considered better able than any other to make wise allowances in the reading, especially if accompanying footnotes or supplementary reports suggest the trends of outside and inside conditions. No long story can be told in a headline; and no single financial statement can hope to answer all questions.

Good management is best served when accounting holds to its plain function of providing dependable statements of cost-facts. Since accounting can never become a substitute for administrative judgement, it should not be burdened with calculation functions which were better made "on the side" and thus entirely according to the individual's desires. We have a tendency to place too much faith in double-entry bookkeeping and to resort too seldom to independent computation problems.

There is therefore nothing in their own science to urge accountants to support anything but a cost theory of depreciation. And there is no reason why industrial management should feel the least inclination to follow utilities into a replacement theory of depreciation, except perhaps a slightly exaggerated idea of the powers of accounting to contribute to sound administration.

In further distinction between a public utility and an industrial concern, it should be noted that much of the former's property, under modern conditions, is very greatly subject to excessive obsolescence—so much so in fact that replacement policies naturally force themselves to the front. Another reason that replacement receives more consideration in utility companies than depreciation lies in the fact that the company does not face the "cost of production" problem so characteristic of manufacturing. Rates for the utility are usually built upon a sliding scale so that some customers pay less than cost—the excess being covered by rates for classifications better able to pay.

[4] The tendency in this country seems to be to organize as much financial information as possible into the double entry accounting system; from some of the accounting literature of Europe it would seem that the tendency there is to keep most "Kalkulation" separate from bookkeeping.

COMMENTS BY LOUIS O. FOSTER

In order to make a statement of the two points of view concerning the valuation of the assets upon which the calculation of depreciation may be based, one need go no further back than the article in the current issue of the *Accounting Review* by Professor Scott on "Valuation for Depreciation and the Financing of Replacements." The article reads in part: "In defense of the use of cost price as a basis for calculating depreciation, Professor Kester writes as follows: 'If we are concerned with real and actual costs of production, by no stretch of the imagination can replacement cost—what it might cost to replace the asset at some more or less distant time—enter into the question. It might, with equal lack of understanding, be said that because labor cost is bound to be higher 10 years from now, this estimated future labor cost should be taken in order to arrive at the true present cost of the product.'" Further on Professor Scott presents his own view as follows: "The argument here advanced in favor of basing depreciation charges upon current replacement values holds, first, that such a practice will afford a more accurate control of operations and permit more effective internal management of the individual enterprise; and, second, that it will afford a better co-ordination of the enterprise with its economic or business environment." More quotations of the same sort might be given from discussions of the subject by various men, but these excerpts will suffice to illustrate the two viewpoints and to point out that apparently there is a difference of opinion on the subject and that the arguments of the exponents of either side have merit.

In the consideration of such a topic there is no doubt but that the accountant must proceed with more than a little degree of care. Nothing is gained by making appear simple that which is complex in its nature; and that the problem is complex goes without saying for it is certain that in practical economics there are many forces which act and react upon each other. The question cannot be considered as a purely academic one, for the practicing accountant must make decisions in regard to whether or not he will record certain things or approve of their appearing in the financial statements to which he certifies.

A consideration of appreciation must necessarily involve a discussion of the theory of value, and this is not the first time there have been differences of opinion on that question. The Classical economists had what is generally called a cost theory of value, and yet they did not fail to recognize the influence of utility. They simply did not think it to be the most important factor. The same might be said of the Austrian School with their subjective theory. They did not deny the existence of costs, but thought utility to be so much more important that the former could be generally ignored. It is now quite generally thought sound to consider value as tending toward the costs of production over long periods of time, while the shorter the period under consideration the greater the amount of attention which must be given to the influence of demand. It is recognized that in market values the exigencies of the moment are the deciding factors and, since the supply of most commodities cannot be increased on the spur of the moment, the forces of demand are the most active. On the other hand, over an extended period the supply has time to adjust itself, and thus the cost of production is the important factor in normal values.

Further than this, the question involves a discussion of capital and income. Concerning the former, the accountant is not, generally speaking, bothered with the question of "what are capital goods?" for he deals with the individual and not with society as a whole. He lists them along with some other property rights on the asset side of the balance sheet; he lists them at their capital value in terms of the common monetary unit; and he lists them at their cost. Let us inquire for a moment into his justification for doing so by considering the case of fixed assets since that is the type with which this part of the discussion is primarily concerned.

Fixed capital goods are intermediate goods, and their primary requisite is productiveness, for they are not wanted, or rather are of no use for their own sakes. The entrepreneur is interested in the products which may be returned from their use. Stated in another way, he is interested in their services. It is from these services that the value of the capital goods to the user is derived. From his point of view the ideal value is the present

value of all those future services after discounting, for differences in time, between purchase and receipt, and after taking into consideration the element of risk which is bound to be encountered. The value of the capital goods to the buyer, then, is forward-looking, something to come out of the future. His is a subjective valuation. But he meets in the market competitors for this same stream of services and this calls into view another aspect of the matter—the conditions of supply of that particular commodity. He must pay according to an objective valuation which is settled by forces beyond his individual control. The price of the capital goods must not be beyond his estimate of the value of the future services to be received or he will not buy. So far, it seems, the accountant has not gone far astray when he records the purchase in his books at cost. This amount is the closest approximation to his ideal value.

The next problem is one of income or rather one of net profits, for the costs of production must be deducted from the gross income. We are here chiefly concerned with the proper costs of production to be applied to specific periods. In the truest sense of the word, income is a flow over a period of time, and not a fund, and therefore, separation from the fund is a necessary characteristic. Thus, in the case of capital goods the services become an income only when they are separated from the goods themselves. But at the same time these services pass over into the commodity produced and become a cost at the time the separation takes place. This would seem to indicate that as far as the asset itself is concerned nothing is gained by taking appreciation into consideration.

It seems that the most logical point of view is to consider the first estimate of capital value, or price which the business man paid as a deferred charge to be spread over the different fiscal periods during which the asset was in use. Each amount is an estimate of the income or value of that stream of services which the produced units during a particular division of time have received from the asset. This is the crux of the situation. That the amount allocated to each period is an estimate, is as important as the concept that the accountant, for his costs, is intereated in expired asset values instead of in the physical condition of the asset. When the capital goods are purchased the enterpreneur forms his judgement of the value of the future services, and that is the amount beyond which he will not pay in the market. He must next make an estimate of the number of periods over which he may expect to receive this stream of services and from that what proportion of the total value of all shall be assigned to each particular period. This is literally true regardless of the method used for allocating the parts of the original asset value to the units of product. Furthermore, it must be kept in mind that all this must be done in advance of any use of the capital goods.

Let us assume that the business man accepts the straight line method of depreciation as the one most suitable for his purposes, and, therefore, decides to assign his original asset value in equal amounts over the following periods during the physical life of the asset. Let us further assume that he proceeds in this manner until the asset is physically half worn out. At this time he has assigned half of the value of the stream of services to past periods, and, as consumed values, has deducted them from gross income in determining his net profits. Now suppose that the exigencies of the moment create a different situation with respect to the remaining half of the services from the asset. Suppose that although there are only half as many services left the value of each one is worth in the market twice as much as it was when the asset was purchased. Down to this point the records have been kept in accordance with the best knowledge available, and, had conditions remained static, the same price of each service would have been charged as a cost in the latter half of the life of the asset as during the first. However, conditions have not remained static with respect to that particular asset. The change in conditions may be due to an increase in demand or the cost of producing the asset or both. It is a market value wherein the factors of demand, supply, and price are mutually interdependent as to their relative position, each one upon the other two. In a word, it seems plausible that half way through the physical life of the asset is the time for re-estimate of the value of the future services to be received. If each service is to be worth twice what it was before it does not seem illogical to include them in the costs of operation at this figure. This is a summation of appreciation from the point

of view that it should appear as a part of the cost of production.

There is, however, another aspect of the matter. This involves a consideration of the nature of the return upon old investments in fixed assets and the effect of that return upon the value of the commodities produced by those assets. It has been generally accepted that rent is governed by the price of the product and as such cannot be included as a part of the cost of production of that product. Further than this, for periods which are relatively short as compared with the total life of fixed investments, the return from them partakes of the nature of rent and, therefore, their value is governed by the returns from the units produced. In a sense, the life of the asset is series or a succession of these short periods which end only at the date of incapacity for further service. The returns during these periods may all be of approximately the same amount or they may be widely variant. To include them as a part of the cost of production in a study of the value of the articles produced is to assume as a cause that which is really an effect. Professor Marshall has said in his *Principles of Economics:* "To include a charge for rent, and add it to prime cost in order to ascertain that cost of production which plays its part in directly governing supply and value, would be to assume at starting the result to be reached, "and," .... it is suggested that the cost of production of any product is to be ascertained by attributing to it a proportionate share of the cost of production of the appliances used in making it. This method of reasoning is circular, except in those cases, rare in the modern world, in which it is possible to assume that the conditions of the trade have remained without important change, at least so far as the making and use of these appliances are concerned."* This latter quotation is pertinent for the individual and his accounts. An acceptance of this doctrine puts depreciation in the status of a reservation from income of an amount sufficient for the replacement fund, whether the latter be considered the original outlay or subsequent estimate. The business man may recognize all of this and make an allowance each period by considering his original expenditure as a deferred charge and deducting a portion of it each period from gross income in order to determine the net amount available for distribution.

The action appears to be perfectly proper, and, for the corporation, is necessary, but he must have a care in calling each of these portions a part of production cost or asserting that his total costs make up the value of his product. The amount of his investments is fixed. He is committed to a definite program, and the costs of his product conform with the sense of the above quotation. In other words, as far as the individual himself is concerned, it may be expedient and desirable for him to include a portion of his original outlay as a deduction in his profit and loss account, but he must realize that it is not, with respect to relatively short periods, the cost of production which enters into a determination of the value of the units produced. It does, however, enter into cost of production of the units produced over a long period of time.

So after all, it seems that the divergence in opinion is one of emphasis. The one who would include a portion of the estimate of the present value of capital goods in costs is interested in having the accounts show for the management as nearly as possible, an estimate of the cost of production which influences the market values of the goods produced. In order to do this he assumes a market value for a section of the capital goods as though it were an article of circulating capital goods and includes it as a part of the costs in the books. Granting his assumptions that he is able to make the estimates, and that it is a good thing for the management to know, who is to say that he may not do so? The one who would include a portion of the original outlay in costs each period is interested in having the accounts show, as nearly as possible, the forces which operate on the side of cost of production into normal or long time value. He is accounting for fixed assets over a long period of time. Granting his assumptions that such is the thing with which management must be concerned, who may say that his course is unjustified? It is the element of time that causes the divergence of opinion. For the purposes of individual accounting each is making an assumption which is not literally true in the strictest economic sense.

* p. 497-4th edition.

There seems to be no reason why one firm may not show depreciation of past values in the accounts and another show depreciation of present values in the accounts. The practical difficulties of the latter course should not be said to present insurmountable obstacles if the management wants those facts and is willing to undergo the expense and trouble of providing them. Nor should the former course be considered inadequate if those are the facts which that particular management wants. In other words, is the entire matter a question of fact for the jury or is it a question of law for the court? It might be desirable and seems logical for the management to decide upon an accounting policy with respect to this question in the same manner as the owner of a newspaper decides upon an editorial policy.

The foregoing remarks have been made from an entirely theoretical point of view. Whatever practical difficulties might be encountered have been left out of consideration because of the distinctive nature of each individual situation. It is thought, nevertheless, that theories may often help in the formation of sound judgements in the solution of practical problems.

COMMENTS BY HENRY RAND HATFIELD

The question as to whether Appreciation (asset) is to be written off *pari passu* with writing off Surplus from Appreciation is not the same thing as the question of recovering replacement cost. The showing of the depreciation of appreciated value like the showing of any other depreciation, can alternatively be done either by crediting the asset or by crediting an Allowance for Depreciating account. This is, of course, an accounting truism. But the author I think seems to link one method of showing depreciation, rather than the other, with provision for replacing at the higher cost. This is unsound.

The propriety of issuing stock dividends for appreciation is not dependent on the value being "as permanent as the business and not associated with some expiring asset."

It is proper to issue the original stock for expiring assets in the first instance, e.g., to purchase a mine, or a patent, or a copyright. Indeed depreciation is reckoned in accounts largely because the capital is invested in expiring assets. (Note Leake's phrase "expired capital outlay") There is no reason why additional recognition should be limited to non-expiring assets.

Unless undue emphasis is placed on the word "past" in the phrase "spreading past cost over the product or service produced." This does not necessarily exclude charging as part of the cost of the appreciation in the value of the consumed article as well as the original price paid. The statement that cost means only original price paid is perhaps correct, but it is a theorem to be proved, not an axiom to be accepted without query. One may argue that the cost of producing an article is the value of what is used in producing. I bought Liberty bonds ($10,000) at 90. Some years later they were unquestionably worth par. I buy a piece of real estate and give the $10,000 bonds in payment. It can be argued that the land cost $9,000. But it is not easy to disprove that it cost $10,000, for I surely gave something worth $10,000 in exchange. Apply this to the consumption of appreciated raw material, or even to the depreciation, or rather the using up of depreciated machinery. Then argue, instead of merely asserting what was the production cost.

> Long before the principle reached into the consciousness of business, economists clearly saw (Adam Smith, 1776) that the continuation of production required the recovery from consumers of all advances made for labor and materials, etc.

Isn't it absurd to say that before 1776 business men did not know they had to get back their capital or they would go broke? I am sure Shylock did, and the East India Company. But perhaps the author means something else, which I cannot fathom.

> When the relationship between a corporation and its creditors was finally worked out.

The "when" is explained in the footnote by reference to Story's "so-called trust fund doctrine of capital stock."

I doubt whether the relationship has been "finally worked out". In any event I believe the "trust fund doctrine" is now pretty generally discredited by jurists.

> There is no alternative but to maintain his investment intact by passing the burden on to the consumer through the use of depreciation as a cost.

The burden is *NOT* passed on by using depreciation as a cost. The only way it can be passed on is by getting a price from the consumer sufficient to cover all costs including depreciation. The author has frequently emphasized the fact that price is not determined by costs. Why claim that it is different here?

A government has no need to recognize depreciation as a cost or otherwise.

But if the government desires to compare the efficiency of different methods of street cleaning, why it is not necessary for the government, as well as the manufacturer, to consider the depreciation of street sweeping machines as an offset to the saving of wages where the sweeping is done by hand?

Would an accumulation of surplus available for re-investment in extending the plant be any more a cause for apprehension in an electric light company than in a manufacturing corporation?

Yes, Because the consumers have been compelled by action of a public utility commission to pay an excessive price, which has not merely been sufficient to reimburse the capitalists for the plant which they have consumed, but also to provide additional plant for a future generation of consumers. The capital, in the first instance was provided by the capitalists. But the provision of capital to supply, say new suburban districts, is made a burden on a set of retiring consumers, who presumably have no interest in the new body of consumers. They are charged for what they themselves have used, and also to furnish a plant which someone else will use.

These conditions do not exist in case of the private manufacturer.

The same argument can be advanced in favor of charging into the cost of production a theoretical interest on capital investment and in favor of using "normal" burden rates to prevent the effect of varying volume of production from being reflected in the production costs.

The author here is trying to argue that it is undesirable to figure depreciation on the replacement cost. His line of argument is that to do so is as improper as to figure interest as a cost, or as to use standard costs. This is bad procedure. There is no necessary connection between the two. Those, and they are many, who favor using standard costs will not be influenced against using replacement cost as the basis for depreciation by being told that to do the latter is just as bad as doing something else which they favor. It is another case of confusing the argument by citing as analogous a matter which is the subject of very serious debate. To make it effective it would be necessary to establish the impropriety of using standard costs, and that would be going too far afield for a discussion of appreciation.

COMMENTS BY JOHN R. WILDMAN

Appreciation is a depreciating element. Accepting the definition that "appreciation is an accretion to the value of an asset, etc.," one must be consistent and accord to the accretion the same treatment that is given to the basic asset value. If it is proper to depreciate and recover out of earnings the original value based on cost, it must be proper to include therewith any recognized increment to the original value.

In true appreciation, since the increment represents additional capital, and the recognition of appreciation is tantamount to an undertaking to keep that much more capital in the enterprise, there is no choice logically but to charge depreciation on the revised value, to operations. If one undertakes, by making provision for depreciation, to maintain an original amount of capital, any increase in the original amount of capital makes it incumbent to increase the provision for depreciation, in order to maintain the larger sum.

In true appreciation, there can be no question of splitting the charge for depreciation, putting part of it against operations and part against unrealized appreciation. We either recognize appreciation, regard it as an addition to capital, and provide for the depreciation necessary to maintain the whole capital investment, or we do nothing.

Charging depreciation on appreciation against unrealized appreciation is equivalent to ignoring appreciation. Where the unrealized appreciation is made to offset the depreciation on appreciation, operations are charged for depreciation on the sum expended for property, and the amount recovered out

of earnings is sufficient only to maintain the original capital investment.

Where operations are charged with depreciation on property values as appreciated, and an amount corresponding to depreciation on appreciation periodically is transferred from unrealized appreciation to earned surplus, there is a negation of the appreciation theory. A given sum may not be held for reinvestment in property and at the same time regarded as available for dividends. If a sum greater than the amount originally invested in property is recovered out of earnings, there is a presumption that the recovery is for the purpose of providing for replacement of the property at the increased value. If the larger sum will be required for the replacement of property, no part of it will be available for dividends. If one adheres to the theory that appreciation increases capital, there can be no question of earned surplus involved, unless and until a corporation revises its capital investment.

Pseudo-appreciation may not work out like true appreciation. In the latter case, appreciation, having been caused by increased productiveness, earnings, presumably, will stand the full measure of depreciation. In cases where the theoretical increase in value results from appraisal, too often the earnings will not support the full depreciation.

After all, the test of appreciation seems to be whether or not the earnings will justify depreciation on appreciation. A corporation seeks not to take less profit because of the depreciation on appreciation, but to recover enough more out of earnings to support the additional capital resulting from appreciation.

GENERAL COMMENTS

BY IRVING FISHER

Mr. Chairman, I feel a little diffident in speaking on so technical a subject, which is only indirectly connected with my own field of economics. I came here not to speak but to listen, and I have been very much interested in the portion of the discussion which I have heard. Unfortunately I was not able to come promptly.

I would like to raise one fundamental point. Before getting to it I would like to say that I am interested in the subject from several points of view. In the first place, a month ago, before the stock market crash, at a meeting of the board of directors of the investment trust of which I am a director, this very question was raised, as to whether the large book profits that had been made through the appreciation of securities should be included as the profit of the trust, and one of the directors who was particularly interested in selling our certificates was quite anxious that the appreciation should be included. The view prevailed, however, which I advocated, that we should stick to the cost entries in our report, but put in a footnote under the statement of the assets, the value of the securities, as to what the market value was. Of course we are now very glad that that method was pursued.

On the other hand, there was included the taken, realized profits, where there had been trading profits from buying securities and selling securities, because those profits having once been taken, could obviously not be taken out through a stock market crash. We are not sorry that we did that.

In the second place, I am interested because of the same problem that is in our income tax. I have been interested ever since I wrote my book, "The Nature of Capital Income," which I think was the first attempt to bridge the gap between economics and accountancy—by the way, a much better book for this purpose has recently been written, as you probably know, by Professor Canning of Stanford University, which so far as I have been able to find is in tune with my own views on this subject and with the views which I expressed on this particular problem in a paper before the American Economic Association some fifteen years ago, "Are Savings Income?" I might have better said, "Is Appreciation Income?" And my conclusion was that it is not, and I think if you follow out the double entry bookkeeping credits and debits microscopically you will always reach that conclusion.

The particular point that I want to raise is in connection with what is the standard

to which you are looking in your books? According to my way of looking at capital and income, when you follow out your debits and credits to the utmost, you find that your income is the final realization, the real income, as we say, if you want to carry it over into psychology, the psychic income. If you follow all the debits and credits, that is exactly where you land, and you can't get anywhere else, and when you confuse capital gain with income gain, you are getting into unsound regions and are sure to be sorry for it in the end in some way. That is exactly what we are doing in our income tax when we are taxing capital gain and making it masquerade as income. And when the original tax plan was started, Cordell Hull, in speaking in Congress, said that there was no intention to include capital gain as income, but as soon as the word "gain" appeared in the statute—that all the gains, profits, income, and so forth, should be taxed—Uncle Sam began to reach out for capital gains to increase his taxes, and the courts finally said that Congress had a right, if it chose, to include capital gains as income, and it speedily did that in a law which taxed capital gains in a special way, which incidentally was a concession that if it was income it was a very peculiar kind of income. Recently this has hit me hard, because the accountants in fixing my own income—Uncle Sam's accountants—decided that certain stocks that I received in exchange for patent rights back in 1913 cost me nothing, and therefore when I sold any of that stock I was to be taxed as income on the total capital value. I would not dare tell you what the total income was that was originally assessed before my own accountants began to argue with them and bring it down, but it was five or six times my real annual income in any sensible appraisal. That just shows how, as Mr. Foster, I think it was, said unsound theory will lead to unsound practice.

Now, the final realized income, as I say, is what you get after you after out all your debits and credits, and is your final realization, but the accountant is always looking to an ideal, whether it is realized or not, and if you could make that distinction I think you would get rid of a great deal of confusion. The real income gain of Hetty Green was very small, because she was constantly reinvesting and saving. Her capital gain was great but her income gain was small. On the other hand, the spendthrift pursues the opposite policy, eats up his capital, lives on his capital and is getting a large realized income through the depreciation or reduction or consumption of his capital. Whereas, the accountant says that the ideal thing is neither to increase or decrease, and therefore he tries to work out on paper what is income and what is not, on the basis, not of the actual performance of the parties but on the basis of a certain ideal, an accounting ideal of constant equilibrium, where the total capital value remains the same, where a person starts with a million dollars and ends with a million dollars, and then you reckon your capital gain or capital loss in with your income gain or loss, in order to end with exactly the same capital value as you began with, and to maintain it throughout. Is that the right ideal? I don't think it is. It is the old accountant ideal, and it is a workable ideal. It is probably simpler than the one I am going to suggest for your consideration. But I think part of our problem is that that standardized, idealized accounting which keeps the capital constant is not really what the people are interested in, so much as to keep income constant. The two things are absolutely out of tune with each other. You can't reconcile them except under certain conditions which are very seldom if ever, fulfilled. A man who has an annuity—say a person who is retired and has no family to leave property to, who has an expectation of life of ten or twenty years, will be given from a life insurance company an annuity. Now, according to this accounting that keeps the capital value intact, he is eating up his capital and he ought to be credited all the time with putting back something in order to see what his real income is, an income which would enable him to die leaving the same capital with which the capitalization of the terminable annuity started; whereas, what he really is interested in is to simply live on this as long as he lives, and then to end with nothing. That is his standard. And a working man who is not accustomed to accumulate capital thinks in that term. Really he is depreciating his capital, using up his capital all the time.

Now to illustrate the difference perhaps most briefly, as I do not want to take so much of your time. I can illustrate by taking a

perpetual annuity, like the Rentes in France or the Consols in England, which are nearly perpetual annuities. On the market the value of these is constantly going up and going down, fluctuating, and an annuitant who had a French Rente or a British Console would be mightly surprised if you included his income, the appreciation during the year, in the value of that capital, or if you insisted on subtracting from his income the depreciation during a year in that capital value, because he is not interested in maintaining the uniform capitalization; he is interested in maintaining a uniform income, and he gets that in his interest payments from the government every quarter, and the mere fluctuations in the capitalization, the capital value of that income, is a matter of very little concern to him unless he expects to change his investment, unless he expects to buy or sell. As long as he expects to hold, he is merely interested in that uniform income stream. Now if there is a constant appreciation through the decrease in the rate of interest; if that is all it is, if the rate of interest becomes three per cent instead of six per cent, so that his capital value is double the perpetual annuity, it is obviously ridiculous if he should try to maintain merely the same capital value. The capital value ought to double, because if he should eat up the half of it in order to maintain the same capital value he would find himself landing with half the income with which he started, and it is income in which he is interested, I take it. It is income we are all interested in. An annuitant is interested in the life income. A person with children is interested in a perpetual income and a corporation is interested in a perpetual income. But isn't the ideal which you really would like to get if you could find a way to do it—and I am not solving the problem; I am merely putting it up to you—wouldn't it be better if you should consciously have in mind as your ultimate accountant ideal or standard, not a perpetually intact capital but a perpetually even income? And particularly couldn't you do something toward this end if you would distinguish between that appreciation which is due to increased income and that appreciation that is due to a decreased rate of interest by which you capitalize that income? Obviously, the latter could be taken care of to some extent. Now a corporation that is debating the question whether it should distribute the appreciation as dividends might be able to make that decision, and today, after the stock market crash, the problem is particularly insistent, because now we probably have a conflict between these two ideals, which ordinarily do not conflict very much with each other. We have had a tremendous reduction in the capitalized values of the future dividends of corporations, because that is what the value of the stock really means, on the one hand, and parallel with that reduction in capitalization we are probably, unless business is going to be more affected than we expect or hope, are going to have a gradual increase in dividends, at any rate in earnings, of these corporations in the future, and if the corporations should hesitate to declare as large dividends as they might because of any reluctance they get from accountants, on the score that capital values had been impaired, it seems to me they make a mistake. The real excuse for urging people to look out for a depreciation in capital values, as I take it, is that generally there goes with that a decrease in income; but if, as I believe is true, this country is sound and we are in a great age of increased invention, increased productivity and increased dividends, the reduction in our dividends would not be sound at this time, rather an increase would seem to be indicated, and we could still feel sure that while we might seem to be, on the books, having an impairment in capital value, we are actually having no impairment of the even flow of income, but on the contrary, can look forward to an income stream that will at any rate maintain its own if it does not increase.

BY A. C. LITTLETON

Mr. Chairman and gentleman, I am personally much more inclined to hasten through this portion of the program and turn you loose upon the question. I am sure that the discussion that will follow will be much more interesting than any summary that I could make extemporaneously of these supplementary papers. I say "Supplementary" because I find very little essential disagreement with the principal points presented in the survey.

Perhaps it would be apropos if I were to take just a few minutes to summarize the last section, or the section of this report which

has just been discussed, and then to follow that with some very brief remarks of my own as to what it seems to me is the fundamental underlying problem of the whole topic.

In connection with the section of the report on the question of whether appreciation is a depreciating element or not, the report sets in contrast three elements which I want to point to again, because it occurs to me that perhaps this will be an opening for discussion from the floor.

> Accounting is concerned with the process of determining by calculation the degree by which the income from services performed repays and exceeds the cost advanced. The purpose of depreciation accounting, therefore, is to allocate previously advanced, long lived cost against the incomes produced by the costs incurred.

That seems to be the fundamental proposition, and then under that there are three points. For the Government there is no depreciation accounting on a cost basis or any other basis, because there are no problems of recovering previously made outlays out of resulting income.

2. For manufacturing and trade—for business generally—depreciation accounts should be on cost basis, because managerial judgment must rest on knowledge of how well specific income recovers the cost of producing that specific income.

The third point: Public Utilities partake of the nature of Government enterprise somewhat, because of the factor of controlled income, that is, commission-fixed rates plus sliding scale charges, and because of rapid progress in the art are subject to excessive obsolescence; therefore they are not purely manufacturing or trading, and their depreciation policy need not necessarily hold to a purely cost theory, but may exist in a large measure to provide an obsolescence reserve, which, as I view it, is quite a different thing from a depreciation reserve.

Now just briefly to what seems to me the essence of the whole question of depreciation as far as accountants are concerned. After all, the final issue rests upon our conception of what constitutes profit and upon our idea of the function of the balance sheet. The two are not unrelated.

One idea of the balance sheet originates in the old balanced accounts; that is, the balance sheet is a final residuum of double entry bookkeeping, whatever is left in the ledger after all nominal accounts are closed, that is. The items are wholly in terms of cost of outlays not as yet brought to their ultimate status as debits to profit and loss, and of debts not yet credited to assets. All of this is proprietor or manager information connected with the necessity for calculating profits.

The other idea of the balance sheet originated in the old inventory or statement of resources and liabilities, made without necessary connection with the double entry system of records. This is primarily a statement of possessions, positive and negative aspects of ability to pay debts. Under modern conditions this is mainly a statement for credit purposes, not as in the double entry balance sheets, a statement primarily of deferred operating data. Items herein, therefore, are not necessarily in terms of cost—that is, in the statement of resources and liabilities, the single entry statement, as one mentioned previously.

In the first case, that is, the double-entry balance sheet, unrealized appreciation is no problem, because all items being cost or outlays only, there can logically be no increment except that which results from comparing returns with the cost of securing the returns.

In the second case, which is the single-entry statement without reference to a set of books, unrealized appreciation may become an acute problem, because hereunder present values, regardless of original costs, may be introduced into the statement. Profit being then the amount of change in the net worth calculated in this manner between two different dates, one may then include two distinct elements: One a difference between specific returns and outlays—that is to say, transaction profits—another a difference between original cost and replacement cost—that is to say, price fluctuation profits.

If the view of the first case prevails—that is, the double entry balance sheet—it is difficult to see how, in theory, anything could be available for dividends except profits calculated on a purely cost basis. Hence unrealized appreciation would be unavailable.

If the view in the second case prevails—that is, the single-entry balance sheet—it is difficult to see how appreciation could logically be made unavailable.

This leaves the accountant in a dilemma. He turns to the law for help, and finds that the law in the first instance restricts dividends to profits, and in the second instance is divided as to what these profits are. So the accountant's dilemma is as great as ever. If he chooses the double-entry view of the balance sheet, the concept of profit is logical and in harmony with his intuition, but such a balance sheet is generally inadequate because of poor accounting in making the ledger entries, and is not acceptable for credit purposes.

If the accountant chooses the single-entry view of the balance sheet, this is adequate for credit purposes but the consequent conception of profit is against his interpretation of the nature of business and of accounting.

ASSET APPRECIATION

Its Economic and Accounting Significance

William S. Krebs

I

The question is being raised more and more frequently as to whether appreciation of assets should be given recognition in the accounts. The answers which are given to this question by accountants show wide variation as regards the conclusions drawn; almost any answer is to be found if a sufficient number of cases are investigated. Since the significance of the question is becoming greater and greater, it is of the utmost importance that it be considered in a scientific light so that if ultimately a definite concept may be arrived at, the accountant can lay down a statement which will present to the business man and the courts the logical view to follow.

Accounting at the outset was concerned largely with the financial relations existing between a concern and its customers and creditors. Very soon, however, this narrow aspect of accounting was modified so that the accounts would record all assets and liabilities and make possible the construction of the balance sheet directly from the ledger. Then followed additional changes which permitted the presentation of a profit and loss statement. In all instances, however, the accountant was concerned largely with recording the historical changes in the financial and operating aspects of the business. Although some thought was given to the uses to which these statements might be put the primary consideration involved showing the chronological events from the point of view of what had happened and whether any irregularities were disclosed.

Later when it became evident that accounting possessed an important relationship to management, the accounts, and particularly the statements, were modified. Accrued and deferred items became recognized, with consequent changes in the balances of the income and expense accounts, so that the latter displayed incomes earned and expenses incurred by periods. Depreciation of fixed assets became recognized on the balance sheet and in the expense section of the profit and loss statement. The doctrine of "cost or market which ever is lower" appeared, greater care and greater detail in classification of accounts was noted and other changes in the accounting system were paraded in review. Scientific cost systems were becoming prevalent for manufacturing concerns, and departmental systems for mercantile organizations. Cost accounting even became applied to the selling, administrative and general expenses of the business. In fact accounting has changed so much during the last generation that it is hard to believe such development could have taken place in such a short time.

At every stage from the beginning of single entry to the present time there have been those who have felt that the latest stage of accounting development was to be the last. Few indeed are there today who would insist we should go backward 30 years, but many there are who fail to see that accounting is as much a part of the process of evolution as is the animal kingdom; who feel that accounting today has come to stay as it is. *An ever increasing* number of individuals believe, however, that accounting will show as marked development during the next 30 years as it has during a past period of equal duration.

What about this question of "Appreciation" in the light of future developments in accounting There are those who say that it is alone "going concern" value that is called for and that appreciation should be ignored. At the other extreme there are those who say that it is present value alone with which we are concerned. The one view

holds largely to the traditional concept of accounting as a record of historical facts and only slightly, if at all, to the view of accounting as an aid to management. The other fails to see the importance of the historical facts of business to the executive and logically portrays a series of instances where present values are of the greatest significance. The one consciously or unconsciously worships tradition, the other throws tradition over without consideration. Surely truth lies somewhere between these extremes.

To us the question of whether appreciation should be recognized is one of fact, pure and simple. Believing that accounting has a right to exist only in so far as it is useful, and believing that the accounting department of a business should give the users of accounting data whatever they need for study, the question is decidedly one of fact. What basis of value does the short term creditor want? What basis of value does the underwriting syndicate want? What does the bondholder want? The stockholder? The prospective purchaser of the business? The government? The operating management? The financial management. These are non-accounting matters, but only in so far as the accountant has accurate answers to these questions can he know what to do when it comes to those who need help along these lines.

With reference to the bases of value needed by the various classes of individuals interested in the accounts, some will want one basis alone perhaps, some another basis alone, still others another basis alone, and some will want all bases. The logical program for the accountant is to present each class with the data which it desires, and as a result present different data to the different classes. Thus with reference to appreciation the answer is as follows: "recognize appreciation for those who need this information. Fail to recognize it for those who do not need it. Recognize cost only for those who want it. Fail to recognize it for those who do not need it. Recognize anything else when needed. Where several bases of value are needed at one time recognize them all." This is the correct concept, it seems.

Curiously enough this recently stated doctrine will be severely condemned by some. Many will insist that we must select one or the other but not more than one. And yet is this a reasonable point of view for anyone to stand by? We do not act in parallel fashion in other walks of life. One traveler goes to New York and while there spends his time largely at the opera and musicals. Another finds his interest in the study of art and accordingly spends his time in the various art galleries. Another is interested in the stage, still another in educational institutions and still another in finance. Each one goes his own way and does the things he prefers. He thus sees the things he wants to see. The sight seeing bus companies would object. They would say, "Better take our trip; you will see everything." This trip is a compromise with a little of this and a little of that, and a little of everything but not much of anything. To some such a trip would have its appeal, but to many the preference to go one's own way is strong.

The attitude of the conventional account on value parallels the idea of the bus company. We must select one basis or the other. We may not select more than one. Our selection will be based accordingly on the one which has the least objections and the most advantages. We will select a compromise and like other compromises it will not exactly fit the bill.

In applying the newer attitude to "appreciation" the answer is of course, to recognize appreciation when needed and fail to recognize it when not needed. The accounting department of the concern is called upon to prepare many reports. In some appreciation needs to be recognized. As an illustration we have the balance sheet prepared for a prospective purchaser of a business, or an underwriting syndicate

asked to guarantee a bond issue. In some of the reports issued appreciation does not need to be recognized. A balance sheet prepared for a stockholder or a short term creditor is an illustration of this. The accountant (private) must have in his possession all facts so that whatever proves to be needed can be furnished. Thus appreciation should sometimes be recognized and sometimes not. But even where given consideration it should be understood that several possibilities exist. These features need elaboration in what is to follow.

II

Is there a difference with reference to the recognition of appreciation whether the asset being considered is a depreciatory one or a non-depreciatory one? That is to say, may we recognize appreciation on some assets and not on others? Is there a difference so far as recognition alone is concerned whether the assets be land, plant and equipment, securities or merchandise? The answer to all these questions is in the negative. It is true that the procedure may be far more complicated in some cases than in others, and may even be quite different so far as its effects are concerned, but from the point of view of recognition only, there should be no different answers for different kinds of property. It might be argued that appreciation on machinery complicates the depreciation problem. Without saying at present whether this is or is not true, it should be answered that complications regarding depreciation have nothing to do with appreciation. The fact that we are troubled with the problem of appreciation does not satisfy the failure to consider appreciation. The question at issue is whether certain classes who analyze the balance sheet may not need this information. Surely a buyer of the business, or an underwriting syndicate wants present values of all assets without reference to whether they are fixed or current or whether they depreciate or not. He may also wish other values. If so, some scheme must be devised to render him the service needed. Otherwise the accountant is not doing his duty.

III

Following is the outline of a broad accounting program relative to appreciation:

A.

1. A *general ledger*, to which postings are made from books of original entry supported by properly approved documents, containing where necessary accounts which control subsidiary ledgers.

2. The fixed assets to be charged at the outset at cost and periodically to be altered for depreciation through the addition of valuation reserves, so as to show them on the conventional balance sheet at cost minus accrued depreciation to date.

3. The current assets to be charged at the outset at cost where possible and periodically to be altered to show cost or market, whichever is lower. Where cost is not feasible the original charge should be made at face values (receivables) and periodically altered through the addition of valuation reserves, so as to show realizable values. Merchandise, raw materials, finished product and goods in process to be shown on the conventional balance sheet at cost or market, whichever is lower, receivables at face values with reserves for uncollectibles, discounts, etc., shown deducted on the left side of the balance sheet and other current assets at realizable values.

4. Expenses to be charged on the basis of cost with the recognition of deferred and accrued items. Depreciation charges solely on the basis of cost decline.

5. Income to be credited on the basis of earnings, recognizing deferred and accrued items, but appreciation not to be regarded as income when unrealized and not always when realized.

6. Appreciation unrealized preferably not recognized at all in the general ledger. In extreme cases, where appraisals have shown appreciation to be real, and where the increased value is measured by increased earnings, positive valuation accounts may be charged with offsetting credits to accounts whose names clearly indicate the facts, viz.:

Land appreciation	——	
To Unrealized Land Appreciation		——

The recognition of appreciation not to affect depreciation charges, the entry being periodically reversed in part.

B.

1. A *separate* ledger, in no way to be confused with the general ledger, to show the findings of authentic and conservative appraisals, to reflect the fixed assets at reproduction cost minus accrued depreciation values and the current assets at current market values.

2. Offsets to appreciation charges to be shown in "Unrealized Appreciation" accounts with credit balances.

3. Depreciation expenses to be shown on the basis of reproduction cost values.

4. A *managerial* balance sheet to be presented to show reproduction cost minus depreciation values for fixed assets and market values for current assets, with the extent and identification of appreciation shown clearly in an independent section on the right hand side of this statement.

5. A managerial profit and loss statement which recognizes depreciation on the new basis.

6. The statements to be clearly marked so that no confusion with the conventional statements can be possible and are to be presented to the executives without prejudice and without interpretation by the accounting department.

C.

The introduction of any other records or statements needed by the executives. The accounting department to be viewed in the light of an important scientific department to meet modern needs, not to be found by 19th Century English practice and not to be considered a necessary evil.

IV

A series of important questions arises when appreciation of assets is recognized in the conventional records. These questions are to be answered from both the point of view of the law and also from that of the management. The problem of the accounting procedure is not to be considered here, but later.

Assuming that appreciation should be recognized how should the increase in value be treated in complementary relation to the asset at the time the appreciation arises? Should it be considered (a) Current Income (b) Earned Surplus (c) Special or Capital Surplus?

The first question relates to the propriety of considering realized appreciation as current income. Generally appreciation is found to have arisen over several fiscal periods, and for this reason the proportion of appreciation to be allocated to the current period is unknown. Even undisputed earnings which have come about over several periods are not properly considered current income by all accountants. Surely appreciation of the type referred to may not logically be treated as current income if the rise in value has been found to have appeared over a period longer than one year.

Moreover appreciation should be placed in the category of unusual items. It is not a more or less normal and expected change in the business. Since extraordinary items have not been viewed as legitimate credits to profit and loss, we have an added reason for not looking upon appreciation as current income.

If in the cases given realized appreciation is not to be regarded as current income there is all the more reason for questioning the validity of the doctrine of viewing unrealized appreciation as current income.

Sometimes appreciation within fiscal periods can be measured, but the fact that this is an unusual item is sufficient to condemn it as current income for the profit and loss account.

In the case of non-operating fixed assets, where the appreciation can be accurately allocated to periods the increase in value may properly be considered current income whether or not realized. Here the purpose of holding the non-operating assets is one involving investment and appreciation is one of the hoped for and perhaps expected happenings. This question is not of the

utmost importance, however, since non-operating assets are generally of relative insignificance.

Physical appreciation also needs consideration. Wines, cheese, violins, antique furniture, oriental rugs and other objects actually become more valuable owing to physical changes for the better. Since concerns deal in these commodities with the realization that these changes are to be expected, and since the concern undergoes other expenses in holding them and also undergoes other expenses the realized appreciation may be considered current income. Unrealized appreciation on these merchandise assets should not be given recognition until the articles are sold, because income is earned at the time the sale takes place and not before.

Having studied the problem of appreciation and current income we pass to that of surplus, both earned and capital. Should unrealized appreciation be considered earned or capital surplus additions? Later on the question of realized appreciation is presented.

The significance of distinguishing between capital surplus and earned surplus for appreciation recognition lies largely in the more important question of whether appreciation may form the basis for a cash dividend. Should our conclusion favor an affirmative answer then it is earned surplus, and if a negative then capital surplus. After all the fundamental point at issue is the one affecting the possibility of a cash dividend.

To view this problem accurately it will be essential to look at the question of dividend payments from appreciation in their relations to the rights of creditors, first from the point of view of the spirit of the law, second from that of the law itself, and third from that of the stockholders. The case of a concern without any surplus is considered at the outset in order to bring out clearly the points involved.

Dividends are not legally payable out of capital but only out of earnings, current or accumulated. The basis for this legal conception rests upon the stockholders' contribution to the corporation as a "Trust Fund". The creditors' equity in a business is of a contractual nature, and so far as dissolution or reorganization are concerned, represents senior rights to all assets. This seniority is, of course, over the rights of the stockholders, whose claims in insolvency are residual. The stockholders are willing that their rights should be junior to those of the creditors—preferred, specific and general—because the stockholders receive all profits, because they have possession of the property and because they have, except in rare cases, complete control over operations. If the business is prosperous the stockholders benefit while the creditors do not except so far as greater security is concerned. It is justifiable that the stockholders should have rights junior to those of the creditors. The creditors have greater safety accorded them because they do not possess the possibilities of gain which the stockholders possess. This safety for the creditors is found in an investment of the stockholders which acts as a margin of safety. It is thought of as a Trust Fund for the protection of creditors. To pay dividends out of the Trust Fund would be to reduce the margin of safety for the creditors and for this reason it is made illegal.

The scientific method of protecting the creditor lies in establishing the Trust Fund according to certain ratios relative to the assets and the liabilities. Just what ratio is best is a matter for separate considerations. For that matter variation should exist in different businesses. Unfortunately the law has not been altogether sound in this connection.

According to the law the par value of the capital stock is considered to be the Trust Fund. It is considered the original capital. When additional shares of stock are sold the Trust Fund is increased owing to alteration in the size of the concern. Dividends may be paid but only out of

earnings. If dividends are paid in excess of earnings they are paid out of the Trust Fund; they are paid out of capital.

Our problem with reference to appreciation is to determine whether dividends paid out of surplus created by offset charges to assets because of appreciation are paid out of capital. Are they endangering the Trust Fund?

Although the law represents only in part a correct conception of the safety of the creditors our attention should be focused first upon the spirit of the law. Are the creditors endangered by dividends paid out of appreciation surplus? The marginal case is cited where the only surplus existent is appreciation surplus.

To us it seems that the creditors are endangered. It is true that with the appreciation in assets, a dividend would leave the assets and the Trust Fund the same as before. This is the ground on which justification has been put forward. But nevertheless, in most instances the creditors are not protected because the assets, so far as units and not values are concerned, are the same as before. In general the assets are not able to function better because of increased values; they will not increase the earnings of the company. To pay dividends would result in reducing the working capital of the organization. Of course all dividends reduce working capital at the time of payment, but when paid out of earnings the normal working capital has been increased with the result that dividends only reduce the working capital to the figure at the beginning of the year. Dividends paid out of appreciation permanently reduce the working capital and hinder the workings of the concern. Thus since dividends cannot be paid out of the appreciated values they endanger the creditors through less efficient operation. Moreover, since the working capital has been reduced the claims of the creditors are injured in the event of insolvency. And legal insolvency is a greater possibility than before. It might be argued that the concern could borrow on the strength of the fixed asset appreciation, but this would increase interest expenses for one thing and alter the financial structure of the concern in a manner detrimental to the creditors.

The argument is also raised that appreciation should be recognized in order to inform the concern whether it should sell these assets. The importance of this argument will be admitted. In cases where the concern could move to new land, cheaper in price, provided it disposed of the old land, undoubtedly this condition should be known and revealed by some balance sheet, but this recognition of appreciation for balance sheet purposes is quite a different thing from that of forming the basis for a cash dividend.

It would seem that in the instance cited it should be capital surplus that should be credited in order that the spirit of the law may be followed. The appreciation brought about by changes in the price level instead of permitting dividends in reality call for a new set of ratios and a changed capital structure. To credit capital surplus is to bring about the tendency toward preventing cash dividends out of appraisal surplus and thus tend to having the concern follow the spirit of the law.

Very often appreciation of assets is accompanied by increased value in use, by bringing about added business or higher prices of its saleable merchandise or both conditions. Readjustment in the distribution of population may be the main cause of these changes for the better. As a result the earnings will rise and dividends may legitimately be increased. But may these dividends be anticipated and in part be paid at the outset? In other words may the concern borrow on long term securities, and increase the working capital at this time and from this working capital pay dividends? The answer seems to be in the affirmative so far as the spirit of the law is concerned. To be sure it is an unwise managerial policy to pursue, but apparently the rights of the creditors are not

endangered. Moreover, in the vast majority of instances appreciation is not of the type which brings about increased income to the concern and should be credited to capital surplus. In those instances involving increased earning capacity earned surplus may properly be credited from the point of view of the spirit of the law.

In passing from the spirit of the law to the law itself difficulty is found immediately. The decisions of the courts both in England and the United States leave one in much doubt regarding the actual status before the law. Cases have been decided in most instances upon some technicality within a specific statute or upon some special facts involving the case alone. Clear reasoning involving accounting and economic consideration is lacking. The courts seem to be fearful and consequently unwilling to express an opinion which might be used as a statement of the problem. More than likely the courts have searched in vain for some carefully worked out program by accountants and economists. Probably the courts will wait until those who ought to have opinions express them in a manner which is not only convincing but which is based upon sound economics and business reasoning.

Appreciation from the point of view of the stockholder presents quite a different angle. Dividends to be paid out of the cash resources of the concern are here not alone involved with the size of the earned surplus balance. To be sure cash dividends may not be paid except when a concern has a balance in the earned surplus account. But the existence of surplus does not justify a dividend. Many factors are at work here. The extent of the working capital, the plans for extension of the plant, the wish with reference to a more sound financial structure, the intentions with reference to acquiring new properties, and the need for additional capital at a time when the earnings are high and the returns are increasing are all factors in this connection even when the surplus is large. That is to say, dividends may not be paid economically in all instances of a large surplus. We should be able to see, therefore, that the problem is of even greater significance when the concern must justify its dividends on the grounds of appreciation. In all probability, dividends from appreciation of assets where no increased earning capacity is manifest are not desirable from the point of view of the long run best interests of the stockholder. Even where the income is increased owing to an increase in the price level, it is not a good policy to pay dividends. The concern is on a new level of prices. It may be that owing to the fact that the liabilities are stated in terms of dollars during a period of reduced purchasing power of the dollar, that the rights of the creditors are not injured, but nevertheless a dividend under these conditions is likely to be the result of a short sighted policy.

V

Our problem here is concerned with the question of what to do about realized appreciation. When an asset is sold for a figure in excess of its book value, to what account shall the credit be made?

Looking at the situation from a legal point of view we may say that this realized appreciation may properly form the basis for a cash dividend. Accordingly the accounting conception following this legal one would prescribe the credit to income for that portion of the appreciation to be apportioned to the year of the sale, and the remainder to surplus on the grounds that several periods are affected.

An analysis of this doctrine, which may be considered the conventional one, shows it to be logical for assets under certain conditions and highly illogical under others. In the case of assets which have increased in value from forces largely outside of those created by the business cycle, no objection appears to prevent the value distribution in the form of dividends, unless a similar asset must be acquired at

the enhanced price. Thus if a concern possesses a piece of land for investment and speculation and this land appreciates, it is a safe policy to utilize the appreciation as a credit to earned surplus after the sale of the land. Should the concern possess a machine that has risen in value owing to rise in price of similar machines, brought about by increased costs of production independent of the business cycle, or by changes in the selling price where the latter is a matter of monopoly adjustment, the so considered realized appreciation is not truly realized appreciation. Should a concern sell such a machine and buy another at the new price it might legally credit the appreciation to earned surplus, but economically it may not do so. It is true that if the various so-called unwritten laws of accountancy are followed, the new machine may be capitalized at the new figure and stocks or bonds may be sold to bring about the required additional capital. But this is a highly illogical procedure. There is just as much reason for creating a new capital structure with the old machine before sale, by crediting the earned surplus and by selling stocks and bonds, the purpose being to receive sufficient working capital to pay a dividend equivalent to the appreciation. One case is as bad as the other. Reasons have already been advanced against the desirability of such procedure for assets not sold. The same reasoning applies to assets of the same character which have been sold.

If the concern can sell the machine at the enhanced figure after allowing for accrued depreciation, and can procure another one of a slightly different kind which has not changed in value, then it is proper to credit earned surplus. This would be a rare example for machinery, but might be found more frequently for real estate. Thus if a concern can sell its land and buildings at an enhanced figure and can secure other real estate of equal operating value to itself at a lower market figure, which means at lower operating value to some other concern, then the credit to earned surplus may be proper.

The test, in the case cited, where the change in price is not affected by the business cycle, has to do with whether a changed capital structure is brought about. The test is the same also where in the business cycle are the dominant factors. In the latter instance, however, the opportunities for substitution are not nearly so great as before, with the result that a sale is likely to bring about a change in the financial structure detrimental to the concern.

Generally speaking we may say that for investments it is proper to credit realized appreciation to earned surplus, but that for fixed operating assets the credit should be the capital surplus which is not available for dividends.

One of the most serious consequences of following the legal concept as an accounting guide in the face of logic to the contrary, is found in the experience of many large industrial concerns with merchandise during 1916 and 1920. The conventional accounting was faulty in showing legal profits in excess of true economic profits, executives did not understand that legal dollar profits were not true economic profits; that they were paper profits. Consequently dividends were paid out of capital without knowledge on the part of those responsible. Many concerns suffered for many years from a condition that was permitted by conventional accounting during periods of prosperity. The business cycle, unless understood by accountants, puts deficits where surpluses belong. Appreciation on merchandise perhaps more than on any other asset should not be considered an earned surplus credit even when sold.*

VI

Our conclusions so far have lead to the belief that appreciation may not ordinarily be credited to income or to earned surplus,

* Further consideration by the writer in Outlines of Accounting, Vol. II, pp. 959-976.

but may be credited to a reserve for appreciation which may or may not be regarded as a capital surplus reserve depending upon the view held regarding the nature of this latter item.

Other questions now appear. One of these may be stated as follows: Is it proper to write off Deferred Charges into the appreciation reserve? In answer it will be understood that there are two types of deferred charges, one deferred assets and the other not assets at all. Unexpired insurance, prepaid rent, office supplies on hand, and unexpired advertising are deferred assets. Discount on bonds payable, deferred losses and organization expense (that portion not capitalized) are not assets at all. The first one of these latter items is a negative valuation account of bonds payable account, the other two are negative valuation accounts of earned surplus account. Our question then relates to the propriety of writing these items off through the appreciation reserve.

The deferred assets should be written off into operating expenses. By definition they are prepaid expenses. To fail to write these off into operating expenses and as a substitute use the appreciation reserve for this purpose, would not alone be to fail to grasp the nature of the former, but would entirely distort the profit and loss account. Moreover with an increased profit figure on the profit and loss account there would be an increase in earned surplus over the true figure. Thus to charge the appreciation reserve for the decline in value of deferred assets would have the same possible ultimate effect as crediting appreciation for that amount to earned surplus.

Discount on bonds payable account is a negative valuation account of the bonds payable account and this account is placed upon the books for two reasons, one to permit the credit to be made in terms of par value following the conventional procedure, and the other to facilitate a charge to the bond interest expense account, each period during the life of the bonds, for an amount representing the excess of bond interest expense over the coupon interest. To write the discount account off into the appreciation reserve is to cause an understatement of interest expense, and a consequent overstatement of profit on the profit and loss account. Thus as before the earned surplus is credited for a part of the appreciation with the resulting dangers of cash dividends out of appreciation.

Deferred losses, organization expense to be written off and other deferred charges not assets are negative valuation accounts of the earned surplus. Accordingly they should be written off into earned surplus and not even into operating expenses. To charge the appreciation reserve when these accounts are credited, amounts to crediting the earned surplus for appreciation and for the reason advanced before is opposed.

It thus seems apparent that neither deferred charges which are assets, nor deferred charges not assets should be written off into the appreciation reserve, although the reasons for the view vary with the particular item in question.

Operating deficit account is in reality the earned surplus account with a debit balance. This means that the former account is a negative valuation account of capital stock account. To write this account off into the appreciation reserve amounts to crediting the capital stock account for the time being, since the earned surplus account may be credited for the first earnings now that the operating deficit has been removed. The effect of the transaction is ultimately to credit earned surplus for appreciation; the same condition created by writing off deferred charges into the appreciation reserve.

The last question under the heading has to do with the writing off into an appreciation reserve created when certain assets appreciate, certain other assets undergoing depreciation. In other words, may depreciation on some assets be charged against an appreciation reserve? The answer, of

course, must be given in the negative. Depreciation is an expense and if the treatment mentioned were followed we have the parallel of the case of deferred charges. The profit and loss account shows a profit figure in excess of the true profit with the consequence of an increased credit to earned surplus. Appreciation is again used indirectly as a credit to earned surplus.

VII

There remains for consideration the relations between the recognition of appreciation and the possibility of stock dividends. Is it proper to charge the appreciation reserve account and credit capital stock account at the time of the fulfillment for stock dividend declaration? Before answering this important question it is essential to view the problem in the light of previous study and to apply it to non-depreciating assets. (a) Does the policy of charging the appreciation reserve affect the profit and loss account? The answer is apparently in the negative. (b) Does the policy result in a possible excess credit to earned surplus? It is not at all clear that this is possible. True enough, the earned surplus account possesses a balance in excess of what it would were the stock dividend declared out of it, but after all this is not the question. The earned surplus account balance is not affected by the stock dividend itself. The options of significance are two, first a stock dividend out of appreciation, or no stock dividend at all. (c) Does the policy of permitting a stock dividend out of appreciation permit indirectly cash dividends out of appreciation? The answer is again in the negative. The dividend possibilities are exactly the same as before. True enough, if the stock dividend had been declared out of the earned surplus there would have been smaller potential cash dividends, but as before this is not the issue. The potential cash dividends are the same whether there is a stock dividend declared out of appreciation or whether no stock dividend is declared at all. This is obvious because of the possibility of a further stock dividend, declared this time, out of earned surplus.

It might be objected that the reader of the balance sheet is mislead. It would be admitted immediately that no reader of the balance sheet should be misled. It is assumed that there will either be footnotes to the balance sheet showing the extent and division of appreciation recognition, or that the left side of the balance sheet will show the extent of appreciation recognition. Thus rather than charge appreciation to the asset accounts themselves, the charge may well be made to accounts which positively value these accounts. The following journal entries illustrate the idea:

Land appreciation
  To Reserve for Land Appreciation
Security appreciation
  To Reserve for Security Appreciation

It would seem therefore, from the above discussion that the objections raised against appreciation as a basis for writing off deferred charges and operating deficits, those relative to direct credits to earned surplus and those having to do with cash dividends, do not apply to appreciation as a basis for stock dividends and that the latter view is sound.

When application of these principles is made to property that undergoes depreciation, the conditions found are quite different. Should the view be held that the depreciation charge should be governed by the new appraisal value, then what has been said about stock dividends for non-depreciating assets holds here. But should the view be held that the depreciation charge should be based exclusively upon the original cost, then difficulties occur for it is not possible to charge the capital stock account and credit the depreciation expense account. If the credit had been made to capital surplus or to a memoranda account then the credit to depreciation expense could easily be made, as there could be a charge to capital surplus account or the memoranda account in question.

THE INTERNATIONAL CONGRESS ON ACCOUNTING

FOLLOWING is the concluding installment of the REVIEW's summary of the proceedings of the International Congress on Accounting held in New York last September. Other sessions were reviewed in the December issue.

EDUCATION FOR THE PROFESSION

REVIEWED BY A. C. LITTLETON

The first day's program of the Congress was mainly devoted to the general subject, "Legislation and Education for the Accounting Profession." The two aspects come rather naturally together, since "legislation" deals with the conditions under which those qualified can practice and "education" deals with the methods of becoming qualified.

In this session almost the whole civilized world passed in review, so to speak. Nationals from twelve countries presented original papers on the topic, and Mr. E. Van Dien (President of the Amsterdam Congress on Accounting in 1926) reported on nine others.

We who are a bit provincial in our outlook find the variety of conditions somewhat astonishing, and at times, hard to follow. Especially is that true in connection with the accountant's standing before the courts of his country and the tendency in some places for the accountant to need to be a "sworn expert."

In matters of education, also, a similar interesting diversity exists and there is much to learn from others' views. Throughout runs a strong sentiment for more and better educational preparation, and it is pointed out that older professions have achieved their enviable standing and their legislative support in a very large measure by increasing their members' capacity for true service through ever rising educational standards. Nowhere can statutory monopoly produce a true profession.

Formal education for the profession in the United States is still generally an incidental part of the work given in the colleges of commerce (J. Anton de Haas, Boston). A great variety of emphasis exists and throughout accounting instruction is carried on in conjunction with other commerce subjects. Generally the objective is training for business rather than training for professional accounting as such. Yet a very considerable training for professional accounting is available in a number of universities. Usually the best training has been found in those schools which begin the accounting work early and carry it on through the four undergraduate years or beyond, mixing liberal arts courses with commerce work and accounting specialties with both. The best training for professional accounting, therefore, is not found in the strictly professional or graduate schools of business, for the time there available (two years) is too short to give the necessary grasp of accounting.

No state, apparently, has yet gone so far as to accept university training as satisfying part of the professional examinations. But in many states the practical experience requirement is shortened for graduates in accounting. Before the War it was not unusual for men to appear for their C.P.A. examination with a practical experience of four or five times the minimum requirement. Now, however, the majority of candidates present the minimum amount. (D. W. Springer, Washington)

The educational scheme in England is the old apprenticeship system adjusted to modern requirements (Thomas Keens, London). The clerk binds himself to serve his principal for five years (three for university graduates). During his articles he studies privately and attends lectures given by professionals before the Student Societies which are affiliated with the practitioners' organizations. At intervals he sits

for his Preliminary, Intermediate, and Final examinations, which cover general educational subjects as well as accounting. [It is especially noticeable that a great deal more law is expected of the candidate in England's examinations than in those in America.] As one of the directions in which educating for the profession may develop in the future, it is suggested that arrangement perhaps could be made with the universities for preparing the candidates on the theoretical side, or by the formation by the profession itself of a school of accountancy.

In Holland education for the profession may be had in the Netherlands Commercial University, Rotterdam (since 1915), or through one of the four associations of practitioners (E. Van Dien, Amsterdam). After due preparation the student sits for three examinations: (1) General education, including four languages, algebra, and arithmetic; (2) preparatory, including business technique, arithmetic of finance, economics, geography, and law; (3) accountancy, including business economics, administrative statistics, organization of accounts, budgets, control, criticism of accounts, reports, history of the profession.

In Germany commercial academic studies are being steadily extended in scope (Paul D. Schourp, Essen). And it is no exaggeration to say that the younger members of the profession are mainly college trained. Academic education is very wide spread in Germany, but special training for the profession is obtainable only at one place at present. This is at the *Institut für Revisions- und Trenhandwesen* (Institute for Auditing and Trusteeship) in connection with the College of Business Administration at Leipzig. After the usual three years in college and after having two years of practice, students may take a fourth year of special training under professional practitioners and sit for an examination in accounting. Special training in accounting is also available in the University of Cologne, but this does not lead to a rigorous and comprehensive professional examination as at Leipzig. Various professional associations admit to membership by examinations, but the lack of any comprehensive preliminary education and professional training prevents any uniformity of practice qualifications. Efforts are now under way to promote a union of associations which shall among other activities regulate education. It is expected in the future to reserve the exercise of the profession to men with a professional college education. The professional examination should then cover: (1) business administration, (2) accounting, (3) commercial law, and (4) economics and finance.

In 1925 the various organizations in Switzerland relating to accounting formed an association of mutual interest (Swiss Chamber for Accounting) with one committee on examinations. (H. Töndury, Berne.) The examinations are in two parts: (a) for employees of accounting departments, (b) for professional accountants and corporation officials. The first requires three years of commercial practice, the second, six years, at least two of which, exclusive of apprenticeship, must have been spent in accounting. This is regarded as merely a beginning and "it can hardly be doubted . . . . that finally university training will be required." The accountant of the future will be less closely associated with figures and will act as adviser on all questions pertaining to business. Then there will be needed "a spiritual training and a general education in economics, above the purely technical, which only university training will be able to confer." The Chamber has made arrangements with a number of Swiss universities to prepare candidates for admission to the accounting examinations, the subject matter of which is now chiefly technical (bookkeeping, mathematics, statistics, auditing, law). The examinations are partly written and partly oral and include two theses or essays written at home.

Education for accounting in Italy (Alessandro Grosso, Milan) has passed through many changes accompanied by disagreement and conflict between the practical accountants and the holders of economic degrees. For many years the Technical Institutes gave two examinations, one of which gave admission to higher institutions, the other, in addition to the first, gave admission to professional practice. But eventually this license ceased to be regarded as a professional certificate and came to be considered merely as an academic certificate. Reorganizations of functions and professional groups has, under Fascist decrees, gone far in eliminating conflict between different groups—"so much so that young men planning to enter the profession of accountancy are, in increasing numbers, completing their training at the university."[1] The syllabus of the courses in accountancy at the Royal Technical Institutes include such fields as: commercial arithmetic, money and exchange, business management, financial administration budgets, bookkeeping and systems, partnerships and joint stock companies, bank accounting, manufacturing accounting, state and municipal accounting.

The accounting profession in Roumania has been regulated by statute since 1920 (Petru Draganescu-Bratesh, Bucharest). The law provides for an examination commission consisting of a professor of the higher commercial schools, the manager of the national bank of the town where the examination is to take place, and an expert accountant having an academic diploma and at least five years of actual professional practice. The examination covers the following subjects: accountancy, commercial and fiscal law, economics and finance, business management, and is partly written, partly oral; the latter being designed to stress the candidate's power of judgment. As yet the curricula of the commercial schools do not cater very much to the profession of accounting, and it may be necessary to add some special courses for this purpose. But there is some sentiment in Roumania (as in Belgium) in favor of admitting to practice (after an examination) only persons who are graduates of commercial universities and who have had a certain amount of practice.

In 1927 the Cuban government created the Superior School of Commerce as a part of the University of Havana. (J. Latour, Havana.) The full course at present takes three years, but it is believed that in the near future it will have to be extended to four or five years. The school offers work for two degrees, both of which entitle the holder to certify to financial statements—*Contador Publico Autorizador* (Authorized Public Accountant) and *Contador Industrial* (Industrial Accountant). For the former the curriculum includes mathematics, political economy, statistics, advanced accounting, auditing, cost accounting, law (civil, fiscal, penal, administrative, commercial), public finance, customs legislation and comparative tariffs. The industrial accountant in addition must pass work in geometry physics and chemistry, mechanics, industrial accounting and appraisals.

Japan provides for the examination and registration of *Keirishi* (accountant) under the law of 1927 (S. Higashi, Tokio). The law states that several groups of persons possess the qualifications of accountant, namely, Doctors of Economics or of Commerce who have studied accountancy, Bachelors who have studied accountancy at an Imperial University or those who have completed the course (including accountancy) at a technical college or schools of similar grade to the above. Other persons may qualify as accountant (if they are Japanese subjects having capacity under private law) by passing a designated examination. The examining committee consists of the vice-minister of Commerce and Industry, as chairman, and several commissioners appointed by the Minister of Commerce from among high officials, accountants and men learned in the subjects

for examination. The written examination includes several obligatory subjects such as science of commerce, economics, civil and commercial law, and one of the following elective subjects: economic policies, currency and banking, merchandising, commercial and industrial management, finance, bankruptcy law, criminal law. The oral examination is held in respect of accountancy and economics.

The basic accounting law of India which was passed in 1918 provided for *Government Diplomaeds in Accountancy* (G.D.A.) under certain conditions (Rustom N. Adarbad, Bombay). The candidate must have a general education at least sufficient to secure entrance into an Indian university, he must study commerce and accounting for two years in an acceptable institution, and he must serve as an articled clerk for a period of three years under a practicing accountant. Changes in the laws are under consideration and it is hoped to place the control of the profession soon in the hands of a chartered association of professional accountants. In this case the prospective accountant would be expected to meet the preliminary examination before signing apprenticeship articles and to complete two other (professional) examinations during the three or four years of his apprenticeship. These examinations should be of a practical nature and of a high standard; they would be expected to include such subjects as bookkeeping, accountancy, auditing, costing, taxation, law, business organization, economics, statistics, and finance.

The more purely legislative aspects of the papers of the first session of the Congress may be more briefly summarized.

For the United States it was pointed out (D. W. Springer, Washington) that the C.P.A. laws of the several states, from 1896 to 1924, were modeled upon the general lines of the New York statute. A new feature appeared in 1924 (Maryland) in requiring the registration of all practicing accountants and setting up the future restriction of practice to those who pass the examinations. In the five years following this first restrictive statute, nine states have passed similar regulatory laws. Incidentally, it is interesting to note the number of certificates granted by state boards from 1896 to June 30, 1929; the number was 13,849, of which 10,272 were based upon formal examinations.

In England the charters granted to the accountancy societies and the ruling of the high courts have restricted the use of the title of Chartered Accountant, but there is no protection of practice. A bill was before Parliament in 1911 which proposed the registration of all practicing accountants. But the bill did not come to a vote and no similar attempt has been made since that time (Thomas Keens, London).

Holland, likewise, has no legislative sanction (R. A. Dijker, The Hague) and feels no urgent need for any. The opinion is expressed that restriction of the liberty of anyone to practice should only follow after the means of training accountants have been well established (preferably by the state), and a sufficiently large number of men are available to supply the needs.

In Germany there is no accounting legislation similar to law and medicine. The aim there at present is to coordinate the several existing accountants' organizations into a single *Reichsverband der Wirtschaftstreuhänder* (National Association of Business Trustees). Some work has been done upon proposed laws but the time is not ripe to press it (H. Grossman, Leipzig).

Italy has long had a confusing conflict of various accounting interests in regard to the conditions of practicing. Those accountants with university degrees and those with practical training alone have, since 1906, been unable to reconcile their divergent views. Nor do the Royal decrees of March, 1929 succeed in amalgamating the two groups, but set up two professional catagories, one of Accountants (authorized as experts to verify financial state-

ments, etc.) and the other of Doctors in Economics and Commerce (authorized as experts in management, arbitrations, etc.). There is some overlapping of functions in spite of separateness in classification (Pietra D'Alvise, Genoa).

The *Société de Comptabilité de France* was founded in 1881, and in 1916 was recognized by the government as a public utility. In 1905 the society established examinations for certificates of three grades: *teneur de livres* (bookkeepers), *comptable* (accountant) and *expert-comptable* (expert accountant). Not until 1927 did the profession secure legal regulation, at which time was established the *Brevet d'Expert Comptable reconnu par l'Etat* (State Licensed Expert Accountant). To obtain this license it is necessary to pass preliminary examination, be articled as an apprentice for five years, and pass a final examination. The preliminary examination covers arithmetic, public and commercial law, mathematics of finance, political economy, and business management; the final examination includes audits and investigations, banking, exchange, fiscal and social legislation, legal procedure (E. Van Dien, Amsterdam).

Several other countries were reported upon at the Congress but either offered no particular variation from those already mentioned or had no legislation for the profession.

The Accounting Review

EDITORIALS

PROFESSIONAL EXAMINATIONS

C.P.A. examinations have long been accepted as phenomena of the first importance in the academic apprenticeship of the accountant. At one time, so far removed from each other were the training for and the practice of the profession that the skilled practitioner was regarded with no little awe in academic byways. He was a moving and dynamic figure, the paragon of the accounting world, and perhaps rightfully so; for was he not a master of an amazing technique—a technique evidenced by artfully designed C.P.A. problems? He had produced no other literature. His creations were pounced upon as manna for classroom consumption; and many were the threads to be spun about their engrossing obscurities. C.P.A. problems were the first footbridge between theory and practice, or, more accurately, between the theories of textbooks and the theories of practitioners.

The American Institute of Accountants has been in a unique position during the past thirteen years in framing a uniform examination for more than thirty states. It has had the opportunity of bettering standards as well as setting them, and under wise and courageous guidance the effects would have been manifold. Many a state board in adopting the Institute's examinations has trusted implicitly in the fact that uniformity would spell progress, eventually at least. Many an examinee has endured a gruelling two days with the expectation that, if successful, a sort of universal acceptation of his qualifications would ensue.

But the results have been discouraging. Apparently the Institute's Board of Examiners cannot devise an examination reasonably free from flaws; it has not done so thus far. The November, 1929, examination again contained a problem that could not be solved from the information furnished. With the exception of decreasing the length of the examination in the last five years, there has been no appreciable change in content since 1917. The type of problem and question propounded has been unvarying.

C.P.A. examinations can continue to be of significance to the teaching profession only if they comply with modern standards. Perhaps text-book writers have been too dependent on them in the past. Perhaps the presence of an increasing number of problem-books on auditing will eliminate that dependence for the future. If teaching materials are to approximate situations found in practice, problems much longer and much more involved must be devised than will ever appear in C.P.A. examinations, even under ideal conditions. Yet, if it be assumed that the shorter type of problem meets the requirements of certain courses, what would the accounting instructor demand in the way of specifications therefor?

Probably he would demand at least three things:

(A) That each problem be instructive, so that the interest of the student may be stimulated, and, in turn, his intellectual powers brought into play.

(B) That technical points be substituted for clerical work. The common long trial-balance-with-adjustments, to be transformed hastily into a balance sheet and statement of profit and loss, should give way to more pointed problems involving much less labor. Clerical speed is a

minor element in the successful training of an accountant.

(C) That the problem require the exercise of unqualified judgments. To accomplish this, facts must be plainly and completely stated, so that so-called qualifications of solutions may be eliminated; such qualifications have no parallel in practice and are a poor apology for an examiner's inability to express himself.

We shall welcome the day when the notion ceases to exist that a vague statement of facts should inspire a C.P.A. candidate to indite a paean of qualifications.

THE COURT ON APPRECIATION

Mr. Justice Sutherland: The company since 1899 has owned and operated all the street railway lines in the City of Baltimore. Its present capital structure consists of $24,000,000 of common stock, $38,000,000 of ordinary bonded indebtedness, and $14,000,000 of perpetual income bonds . . . . The present value of the property used was fixed by the Commission at $75,000,000 . . . . Included in this valuation is $5,000,000 for easements in the streets of Baltimore . . . . The Commission fixed a rate of fare permitting the company to earn a return of 6.26 per cent on this valuation . . . . Annual returns upon capital and enterprise, like wages of employees, cost of maintenance and related expenses, have materially increased the country over . . . . What may be a fair return for one may be inadequate for another, depending upon circumstances, locality, and risk . . . . "The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties" (*Bluefield Co.* v. *Pub. Serv. Comm.*, 262 U.S. 679) . . . . There is much evidence that a net return upon the valuation fixed by the Commission should be not far from 8 per cent. . . . . It is not certain that rates securing a return of 7½ per cent or even 8 per cent on the value of the property would not be necessary to avoid confiscation. . . . . One of the items of expense to be ascertained and deducted is the amount necessary to restore property worn out or impaired so as continuously to maintain it as nearly as practicable at the same level of efficiency for the public service . . . . Manifestly, this allowance cannot be limited by the original cost, because, if values have advanced, the allowance is not sufficient to maintain the level of efficiency. The utility "is entitled to see that from earnings the value of the property invested is kept unimpaired, so that at the end of any given term of years the original investment remains as it was in the beginning" (*Knoxville* v. *Water Co.* 212 U.S. 1). . . . . This means present value. It is the settled rule of this Court that the rate base is present value, and it would be wholly illogical to adopt a different rule for depreciation.

Mr. Justice Brandeis (supported by *Mr. Justice Holmes* and *Mr. Justice Stone*): A net return of 6.26 per cent upon the present value of the property of a street railway enjoying a monopoly in one of the oldest, largest and richest cities on the Atlantic Seaboard would seem to be compensatory . . . . It is 6.70 per cent if, in valuing the rate base, the prevailing rule which eliminates franchises from a rate base is applied. And it is 7.78 per cent if also, in lieu of the deduction for depreciation ordered by the Court of Appeals, the amount is fixed, either by the method of an annual depreciation charge computed according to the rules commonly applied in business or by some alternative method . . . . Franchises to lay pipes or tracks in the public streets, like franchises to conduct the business of a corporation, are not donations to a utility of property by the use of which profit may be made. . . .

The Maryland public utilities law, in common with the statutes of many states, forbids the capitalization of franchises. . . . . Easements differ from ordinary franchises only in the technicality that, under the laws of Maryland, the right to use the streets is, for taxation purposes, real property, whereas ordinary franchises are personal property . . . . The amount which the Commission fixed, in its original report, as the appropriate depreciation charge was $883,544. That sum is 5 per cent of the estimated gross revenues . . . . The Commission added, in its supplemental report, $755,116 . . . . ordered by the Court of Appeals under a misapprehension of the nature and function of the depreciation charge . . . . which, on the rate base of $70,000,000, would add 1.08 per cent to the estimated return . . . . Acceptance of the doctrine of *Smyth* v. *Ames* does not require that the depreciation charge be based on the present value of the plant. For, an annual depreciation charge is not a measure of the actual consumption of plant during the year . . . . Where it is known that there has been some lessening of service life within the year, it is never possible to determine with accuracy what percentage of the unit's service life has, in fact, been so consumed . . . . The main purposes of the charge is that irrespective of the rate of depreciation there shall be produced through annual contributions, by the end of the service life of the depreciable plant, an amount equal to the total net expense of its retirement . . . . The depreciation charge . . . . preserves the integrity of the investment, it serves to distribute equitably . . . . the only expense of plant retirement which is capable of reasonable ascertainment, ... and it enables those interested . . . . to ascertain, as nearly as is possible, the actual financial results of the year's operation . . . . The replacement theory substitutes for something certain and definite . . . . a cost of reproduction which is highly speculative and conjectural and requiring frequent revision. It, moreover, seeks to establish for one expense a basis of computation fundamentally different from that used for the other expenses of doing business . . . . By those accustomed to read the language of accounting a depreciation charge is understood as meaning the appropriate contribution for that year to the amount required to make good the cost of the plant which ultimately must be retired . . . . The cost of replacement at the termination of the service life of the several units or of the composite life cannot be foretold . . . . Such a system would require the consumer of today to pay for an assumed operating expense which has never been incurred and which may never arise . . . . If, instead of applying the rule of *Smyth* v. *Ames*, the rate base of a utility were fixed at the amount prudently invested, the inevitable errors incident to estimating service life and net expense in plant consumption could never result in injustice to the utility or to the community. For, if the amount set aside for depreciation proved inadequate and investment of new capital became necessary, the utility would be permitted to earn a return on the new capital . . . . It is clear that the management of the Railways deemed the charge of 5 per cent of gross revenues adequate . . . . If the addition to the depreciation charge ordered by the Court of Appeals was proper for the year 1928, it should have also been made in the preceding five years. Upon such a recasting of the accounts, no profits were earned in 1924; and there was no surplus fund from which dividends could have been paid legally. If the contention now urged by the Railways is sound, the management misrepresented by its published accounts its financial condition and the results of operation of the several years; and it paid dividends in violation of law.

Thus runs the decision in *United Railways and Electric Co.* v. *West, Chairman, et al.* (U. S. Supreme Court, Nos. 55 and 64, October term, 1929, January 6, 1930). Accountants will wonder at the logic be-

hind the majority opinion of Mr. Justice Sutherland.

If the decision be generally applied, public utilities will be given a preference not enjoyed by competitive private enterprise. Competition confines maximum costs to the costs of production of the marginal producer. The marginal producer, whose income is just sufficient to keep him in business, does not reckon costs of replacement as present costs, because, not knowing whether he is to be in business tomorrow, he is content for the time being to recover such portion of his present investment as he can. In fact, he is compelled by his very circumstances to trust to the future to present him improved production tools at *less* costs than the costs of his present operating equipment. Inventions and improvements in industrial processes and methods move forward at a rapid rate, and the experience of business generally is that the cost of the equipment of tomorrow is less than the cost of the equipment of today. The actual outlay ten years hence to replace machinery now owned cannot be foretold with any accuracy. Competitive business must still rely on expired capital outlay to determine its costs. The market quotations of public utility stocks have already risen to dizzy heights and decisions such as the present one will give additional impetus to the capitalization of their speculative future earnings. The inflation of public utility securities has been given a quasi-legal stamp of approval.

Apparently but few have questioned the validity of appraisals of public utilities. Accountants not infrequently find that so-called costs of reproduction are far in excess of the actual outlay necessary to replace an existing plant. Factors allowed for various sorts of overhead, supervision, and contingencies, and for going value are often so liberal as to give little significance to the final total. Further, the appraiser's conception of accrued depreciation—to be deducted in determining present value—is almost invariably confused with accrued depreciation for accounting purposes. The appraiser may show property about to be scrapped, with little or no salvage value, as 40 per cent depreciated, under the theory that no property actually in operation can be depreciated more than 50 per cent. One appraiser has defined accrued depreciation as the money outlay necessary to put the property back in substantially 100 per cent operating efficiency. Whatever the theory behind such practices, it is certain that utility commissions and the public generally rarely grasp its significance. Now, with "costs" of reproduction sanctioned, the theories underlying valuation and depreciation are bound to multiply.

One wonders what bookkeeping procedure is contemplated in giving effect to the decision of the Supreme Court. What is to be done about depreciation on appreciation? Since the public has made the contribution of realized appreciation, is it to be credited therewith and eventually to share in the profits which such additional capital has earned? Or is the appreciation available for a stock dividend and thus the cause for a further raise in rates?

REVIEWS

Volkswirtschafliches Wörterbuch (Economic Dictionary) by Hereward T. Price. Julius Springer, Berlin. (G. E. Steckert, New York). Vol. I, English-German. (1927), 220 pp., Vol. II., German-English. (1929), 676 pp.

The story is told of a cowboy snow-bound in a lonesome cabin with only a dictionary for company. "Mighty instructive readin'", he called it, "but too darned disconnected." As a matter of fact, a good dictionary is actually very absorbing if we once give ourselves to exploring within it. A good dictionary will be rich in synonyms and, if space permits, will differentiate between the shades of meaning. The more power we have over synonyms, the more we will avoid the loose use of words, with a consequent increase in our clearness and preciseness.

The study of a foreign language has just the same effect—it increases our ability to use our own language properly. We are largely unconscious of the bias in our word "payment", for example, until we find two words in German *Auszahlung* (out-payment) and *Einzahlung* (in-payment); we are satisfied to overwork our word "balance" until we find three in German, *Bilanz, Saldo, Rest.* But, on the other hand, we sometimes find foreign words rather lacking in the distinctions which we feel lie in some of our terms. *Forderung* (claim, outstanding debt) is not so obviously an asset as "Accounts Receivable"; with us "Accounts Payable" is likewise an outstanding debt. Dictionaries can be interesting.

Volume II, the German-English section of this dictionary, is a carefully selected vocabulary with special reference to economics and business administration. It was not particularly designed for accounting use, but is the best for that purpose to come to the reviewer's attention. The growing number of excellent accounting books to appear in German and the international interest in accounting matters as evidenced by the recent Accounting Congresses of 1926 and 1929 suggest that he who has a start in the German language would do well to brush up and read of this new material.

It goes without saying that such a dictionary as this one would be very helpful indeed to candidates for the doctorate in economics or business. Ordinary literary dictionaries do not begin to meet their needs in regard to technical terms. Incidentally, a good companion volume for use in preparation for the doctor's examination in French is "Financial Terms and Phrases", by J. D. Kittredge (Dutton, New York).

The author of the Economic Dictionary comes well recommended for the task by his previous training as philologist on the staff of the New English Dictionary under Sir James Murray; and is now Associate Professor of English in the University of Michigan. He has introduced a refreshing innovation in the frequent use of textal citations to the literature of the subject as a means of leading the student further into technical usage. For this purpose he appends a nine-page bibliography; for accounting he generally cites Montgomery—*Financial Handbook,* and Schmalenbach—*Dynamische Bilanz*—writers who will unquestionably be accepted as leading modern authorities on accounting in the United States and Germany, respectively.

A careful comparison with two other recent dictionaries indicates a superiority for many purposes of the present volume. This is nowhere more evident than in a comparison of the number of word-compounds found. Although the other dictionaries both appeared within a period of seven years prior to this time, the increased showing of compound words based upon certain modern root forms is very large in the most recent volume. A few examples will emphasize the point, for compound words are of great importance in German.

Compounds using *Steuer* (tax) are nearly three hundred in number, which is six times as many as appear in either of the other two dictionaries. Compounds of *Arbeit* (labor) are five times as numerous, being over two hundred in all. Others are given more briefly as follows: *Wirtschaft* (economic) six times as numerous, *Betrieb* (administration) four times, *Konjunktur* (business cycle) ten times, *Vermögen* (property) five times, *Bilanz* (balance sheet) three times, and *Kosten* (costs) shows twice as many compounds in this new dictionary as in the others.

Considerable care is taken to interject explanations where apparent cognates would not properly render the sense of the original. For example, under the German word *Motor* we find—"Engine, not used in the sense of automobile"; and again, under *Konzern*—"combine—not so general in meaning as the English *concern.*" Equal care is taken to make clear the sense of English words of restricted meaning. "Baby-bond" is one example where synonyms and literal rending fail; "fund" is another. Both, however, are made quite understandable by a descriptive sentence.

Some terms much used in accounting and business administration are more closely translated in this dictionary than in the other two compared. "*Konjunktur:* in business language, market prospects, business outlook—in political economy the word tends more and more to be confined to the sense: business-, trade-, or economic-cycle." The other dictionaries were content to render the word by its apparent cognate "conjuncture" which very seldom would convey the author's meaning. Such faults in a dictionary may at times be partially responsible for translations which sound stilted. *Vermögen* is generally "fortune, estate", but this

dictionary stresses the business meaning "property"—almost in our sense of "assets." Such a word now much used, as ***Beschaffungswert*** (value at time of acquisition, original cost), appears only in this, the most recent book of the three. Of course, it is generally possible to get some inkling of the meaning of a compound German word by breaking it down into its constituent words and looking them up separately (***Beschaffung*** = procuring, ***Wert*** = price). But this is not entirely trustworthy; too often the result makes a translated sentence that sounds like a primary scholar's attempt to "make a sentence containing the words ———— ————."

On the other hand the author has sometimes missed a chance to clarify a term that needs it for the English reader. Take ***Forderung*** (demand, claim, standing debt); for accounting usage it is not clear whether debts receivable or payable are meant; not until one becomes acquainted with the German use of ***Schuld*** (debt) for accounts payable is it clear that ***Forderung*** generally means accounts receivable in accounting. In the word ***Bilanz*** another good opportunity slips by. It is rendered generally as "balance" and often translated thus, to the confusion of the English reader. This dictionary gives preference to "balance (sheets)." That is better, but the German term is broader than our "balance sheet"; it often comes closer in the reviewer's opinion to our sense of "financial statements", thus including more than merely a statement of assets and liabilities. "***Ertragsbilanz:*** balance showing gain, profit, or yield" might be closer to the English meaning if rendered as "revenue statement"; and ***Erfolgsbilanz*** (literally, results-balances) would be "Profit and Loss Statement".

This sort of criticism is very easy for a specialist in a technical field to make of any dictionary editor. But it is not a very sever indictment because the technical specialist's own choice of words, if he were doing it, would no doubt leave many general meanings out altogether. The obvious thing for the critic to do is to use thankfully every aid he can find (such as this dictionary) and compile his own list of special terms in their narrowly technical sense.

In accounting some work on such a list of such technical terms is in progress under committees of the American Institute of Accountants. And anyone who undertakes to criticize another language for a lack of clear distinctions between partial synonyms should first review the confusion that exists in his own tongue when it tries to be closely technical with everyday words. For this reason the reviewer declines to engage in any comment upon the "income and expense" words of this dictionary, although he gave them particular attention in his examination. When we have decided upon the proper usage to accord our own words—revenues, income, receipts, earnings, gains, profits, and disbursements, expenses, expenditures, payments, costs, outlays, charges, overhead, etc., etc.—then it will be time enough to be critical of the German words: ***Erfolge, Einkommen, Ertrag, Gewinn, Nutzen, Einkünfte, Verdienst, Einzahlung,*** and ***Auszahlung, Auslage, Spesen, Ausgabe, Kosten, Unkosten, Aufwand,*** etc., etc.

In the meantime the dictionary user must make the best of it. The same words may be found explaining several terms, but so it is, too, in his own dictionary (which he so seldom consults). The refinements of distinction come through wide reading and acquaintance with the usage of writers in special fields. A dictionary is only a *help* to translations anyway—no one would claim any more for his work—and some responsibility must rest upon the translator. One can never find word for word synonyms throughout his dictionary; the very embarrassment which he experiences as a beginner in choosing out of a number of apparent synonyms the particular word which renders the sense of his author, is the thing which finally gives him real power in capturing foreign language thought. Thus the beginner pines for a dictionary where each word is given a single equivalent, but later such a dictionary becomes hard to use because, for catching the delicate shades of meanings which he now seeks, single equivalents are quite inadequate.

In this connection he will find this dictionary very serviceable. The richness of its economic and business vocabulary particularly recommends it and the care with which the literature was combed for its terminology is much in its favor. Its shortcomings are largely characteristic of dictionaries in general; its points of superiority to other recent dictionaries for use in its special field have been pointed out.

In form and typography it is very good; handy size (without being "pocket size"), compact in style, secure in binding, flexible pages which "ripple" smoothly (a great help in a hand dictionary). The covers are cloth and light in weight, so typical in German bindings, and may be expected to buckle somewhat under use and a dry atmosphere. The paper, however, is excellent and clear white, which helps the type. The type is in strong contrast, the German words standing out in clear boldface, as is so necessary to eye ease in use. The definitions following the words are in Roman type with faces of better than usual style—a point much in the book's favor since the type style is so like what our eyes are used to. European styles of Roman type do not always so conform to our desires.

The growing interest here in what Europe writes and the growing interest there in what is written about business here, make this new dictionary especially welcome. It is hoped that the author may find time to revise and extend his Volume I (Eng-

lish-German) before turning to new ventures, especially because of the German interest now in everything connected with American business.

A. C. Littleton

Interest, Annuities and Bonds, by Herbert Tate. Sir Isaac Pitman & Sons, Toronto, Canada, 1929, 103 pp.

The material presented in this brief book comprises a series of lectures given to students of McGill University in preparation for the C.A. examination. The principles of compound interest and annuities are described in a fashion to enable persons not versed in higher mathematical concepts to assimilate them thoroughly. The formulæ given are essentially those which a practicing accountant should know. The author has not only shown the mathematical derivation of these formulæ, but has, in several instances, explained, in terms of pure reason, how they can be arrived at if the principles are not known.

Chapter I deals briefly with the fundamentals of simple and compound interest. The familiar formula $S = P\,(1 + i)^n$ is given, and the relationships between S (amount at compound interest), P (present value), i (effective rate of interest) j (nominal rate), and n (number of years) are so well treated that the reader is provided with a substantial foundation for the entire subject.

Chapter 2 is a concise explanation of *equated time:* that is, the time when a single payment can be made which will discharge a number of debts due on different dates. The development of the formula is perhaps difficult to follow, but again the author elucidates the entire procedure by expressing the results in words which will enable the most naïve layman to solve the problem: "Multiply each amount by the time the bill has to run, add the results, and divide by the sum of the amounts."

Chapters 3 and 4 continue the functions described in the first chapter. S_n now represents the value of an annuity of 1 at compound interest where the annuities continue for n years. Similarly, A_n is the symbol for the present value of an annuity for n years, and corresponds to P in the formula given in chapter one, or the amount upon which interest was compounded for n years. The author makes clear the importance of the S_n function in computing the periodical rent to sinking funds.

A deferred annuity is described as an annuity which is not entered upon until the lapse of a certain number of periods. The value is perhaps best shown by the formula

$$_{m|}a_{\overline{n|}} = a_{\overline{m+n|}} - a_{\overline{m|}}$$

m being the number of years before the first annuity is paid.

Chapter 5 is a discussion of depreciation. The straightline method, percentage of book-value method, reducing-balance method, and the sinking-fund method are illustrated and the advantages of each are considered. Capatalized cost is also discussed in this section. The formula

$$C\infty = c + \frac{1}{i} \cdot \frac{1}{s_r}$$

is applied to the problem of finding the amount necessary to not only construct a road, but to provide a fund whereby the road can be reconstructed every r years.

In chapter 6 is a comprehensive study of bonds: kinds of bonds, price, amortization of premium, accumulation of discounts, value of bonds between interest dates, and bonds sold on a yield basis. Accompanying each section are problems illustrating the respective points. Each of these phases is dealt with in great detail. The subject is treated in such a fashion that even the untutored investor can gain a very adequate knowledge of bonds and the often intricate problems which they involve.

Chapter 7 deals primarily with the repayment of a debt by equal installments. Such problems as (a) the amount of the installment, (b) the capital in the first installment, (c) the capital in the kth installment, and (d) the capital outstanding after the kth installment is introduced.

Chapter 8 is a brief appendix, and is followed by a number of tables. As a whole, the book is characteristically succinct. It should prove to be a valuable reference book to students of finance and accounting.

E. L. Sandberg

The Banking Process, by R. G. Rodkey. Macmillan Company, 1929., XII, 354 pp.

This brief text is intended, the author tells us in his preface, to supply the want of a description of "the process by means of which our present day banking system in the United States actually functions." The greater part of the book is, in fact, devoted to a practical description of our commercial banking system, with a short chapter, in addition, on investment and savings banks, and another on agricultural credit. But there is no description of the internal operation of a bank, and the whole treatment is too brief and incomplete to constitute a thorough-going text on practical banking. Nor is there anything here, as the preface would lead us to expect, that is not already familiar. The claim to being a realistic study of our banking process must rest rather on what is excluded than on anything unusual in the information given. Abstract principles of banking theory are, in general, allotted little space. Historical

study is limited to a brief discussion of certain aspects of our national banking system as it existed before 1914. Virtually no reference is made, for purpose of comparison, to foreign banking systems.

Although the author in general eschews questions of theory, one important exception deserves notice. There is an extended discussion of the relationship of loans to deposits. Indeed it is not entirely clear whether, in choosing his title, "The Banking Process," Professor Rodkey had primarily in mind a matter-of-fact description of banking practice, or his controversial thesis, argued at length, concerning the "process through which the loans of one bank become the deposits of other banks, and just how and to what extent this process makes possible the multiplication of deposits in the banking system as a whole on the basis of a given reserve" (p. vi). Rodkey rejects the view, generally accepted since the days of Macleod and Dunbar, that banks largely create their deposits in the very operation of making loans, and allies himself with Professor Cannan (see Economica, 1921) and a small minority of British writers who would seem to make banks but intermediaries between borrowers and lenders. To this latter viewpoint Rodkey contributes a vigorous, but unconvincing, argument (pp. 23-30, 36-42, and ch. 15).

The arrangement of the book is unusual. In order to bring the reader early to the concrete and the more familiar, the federal reserve system is discussed in chapters 8, 9, and 10, after but 85 pages of general material on the nature of banking collections, primary and secondary reserves, and the development of the national banking system. Four chapters follow on particular features of the money market, such as the bank acceptance, commercial paper, foreign exchange, and agricultural credit. Then we are brought back for three chapters to some additional general considerations of bank credit and its regulation, followed by an interesting chapter on the changing status of commercial banking, and a concluding chapter on the bank statement. 60 pages of appendices are added, dealing with problems in bank statements, text from the McFadden Act and the Federal Reserve Act, and a study of reserve requirements under the Federal Reserve Act.

All in all the book seems best suited to students in a technical school whose interest in banking is incidental and practical. The material included is generally good, but too much has been completely omitted or inadequately treated to make this a satisfactory text for a thorough course in banking. The style, while it will not prove pleasing to the critical reader, should make the subject easy and clear to the elementary student. Such textbook devices as captions are freely used to help the student organize the material.

Harry E. Miller

Accountancy in Modern Business, by Dr. O. Wunderlich. Angus & Robertson, Sydney, Australia, 1928. 103 pp.

Accountancy in Modern Business embodies the conclusions of 27 years' experience. The book is a careful, comprehensive, illuminating and well balanced view of the author's conception of modern accounting. It covers a wide field, including the auditor's certificate, the introduction of prime costing, market fluctuations, profit, stock and production, and sales accounts, cost accounting, and the ethics of disclosing appreciation. Also included in the book is an appendix which gives an analytical review of accounts together with a treatise on factory and works accounting.

The author brings out that accountancy is not an end in itself; its purpose being to serve as a means to an end, and that it should be a record of transactions drawn up with the sole object of furthering the interests of business.

While the work is largely descriptive, a certain amount of critical analysis is included.

Dr. Wunderlich takes up at some length a discussion of the greater efficiency of modern accounting, showing that by its use the maximum amount of service is obtainable. His theory ties together the general or financial accounting with the cost accounting.

Objection is made to the present day methods of inventory valuation. The author points out that values taken at purchase price or market rates, whichever is lower, makes it impossible to bring business accounts that rely on true values into line. To the author this formula is a relic of bygone days, when methods were crude and conclusions unsound. His argument for showing appreciation on the books is well taken, and is worthy of deep consideration by the accounting profession. To the reviewer, the pricing of the inventory offers scope for some very interesting observations. The author would establish a fluctuation account and handle market variations through that account, the balance of the fluctuation account reconciling market values with cost figures.

In the chapter "Outline of Modern Accountancy" the author presents a graphic description of the working of his system. Through the use of schematic layouts of accounts he outlines a framework for showing the entire operation of a business, which can be easily understood. His principal accounts are a so-called Stock and Production Account, a Sales Account, and a Profit Account. On the stock and production account and sales account together are recorded monthly the entries which formerly went into the trading account and the profit and loss account. The monthly trial balance includes the balance of the stock and production account, consisting only of stocks, and the balance of the sales account, which, in other words,

is the net profit on sales. The profit account receives the profits and losses from all sources. These accounts are discussed in detail.

The chapter on the "Ethics of Disclosing Appreciation" is presented in a very clear and concise manner. Dr. Wunderlich points out that appreciation should be treated in a manner similar to that of depreciation, that is, the same principle should be applied in both cases. He maintains that if a complete grip of affairs is to be obtained a disclosure of appreciation is necessary, also, that it would be more satisfactory to actual or prospective stockholders to show the true position of a business from the point of view of values, rather than according to the books. However, to the reviewer, no profit is ever made on anything while it is held: the profit is only imaginary, so-called paper profit, until the article has been exchanged and the appreciated value realized. Cost of merchandise which improves with age may properly include carrying and treating charges, such as storage, insurance and drying charges.

Dr. Wunderlich contends that in modern business a different interpretation is made between the sources of profits, and that profits or losses may, therefore, arise from variations in values, and should be shown as such.

The appendix in addition to giving a review of the workings of the various accounts in detail, presents an elementary treatment of Factory and Works Accounting which may be easily understood by the business man. In fact, the theories and procedure set forth in the appendix are an important part of what a business man should know. They form the basis for a proper understanding of modern tendencies in cost accounting.

Although the book departs from the present-day accepted methods of accounting, it is intended to be suggestive and not arbitrary.

PHILIP H. HENSEL

Credit Bureau Management, by J. R. Truesdale. Prentice-Hall Inc., New York, 1927. xv, 297 pp.

An excellent work of its kind. Contains facts and statistics that will help the Bureau Manager as well as the lay Credit Man. With the growing understanding of the need for reliable agencies it should prove a good source of information for merchants and executives. J. H. EDGERTON

Die Marktverbande, I. Teil. W. Vershofen. Verlag Der Hochschulbuchhandlung, Krische & Company, Nurnberg, 1928. 180 pp.

This first volume of Vershofen's book takes up the theoretical foundation of his study on "Market Associations," while the second will deal with their practical problems; the first part is an attempt to present a theory of all concerted action influencing any market, including producer's and trader's as well as consumer's and laborer's associations.

Co-operation of individuals in the market is justified by Vershofen on the ground that our economy is based on "exchange" which can only be effected under a money economy and under concerted action which relieves the individual as such from bargaining and puts the price making process on a broader basis and which, by abolishing the struggle between competitors, leaves only the sellers-buyers fight to be carried on in the market itself. In the same measure as the necessity of "exchange" spread to all parts and phases of the economic order the market organizations will gain in importance.

On account of the varying difficulty of integrating interests for the purpose of concerted action and on account of well-known difference in adaptability of products, services and "chances" to unified control, the market organizations do not all have equal strength and bargaining power. In fact there is a dangerous tendency that a minority well adapted to monopoly will gain the upper-hand very much to the disadvantage of society.

Governments have no authority to forbid the existence of market associations; their duty is to regulate them so as to balance the power in the market. Vershofen proposes, in analogy to the central banks controlling the monetary situation, a "Control and Holding Bank" with the following duties:

(1) Supervision of all kinds of associations using concerted action to influence any market.

(2) Supervision of their price policy and determination of reasonable prices (in case of complaints) by procedure of an arbitrary court.

(3) Direct control of prices in case of noncompliance

- (a) by buying the majority of its capital stock (in case of trusts, for instance)
- (b) by dissolution
- (c) by the organization of a compulsory syndicate (Zwangs syndicate)

This "Control and Holding Bank" interferes with price policies only provided that competition is absent or too weak.

Public enterprizes and public utilities should be supervised by the "Control and Holding Bank" in order to secure in their operation a balance of the interests of all concerned.

Vershofen holds a careful definition, and separation of the different kinds of McKel-Associations for very essential, a definition which shows their specific structure and position in the market. He deems the existing terminology unsatisfactory and devotes quite a portion of his book to the working out of new definitions. But one cannot help believing that what he finally achieves with the aid of borrowed psychological expressions and formulæ involving numbers, letters, and signs, may be quite

fascinating to people who look for an intellectual pastime, but that Vershofen in that part of his book has contributed little to the better understanding of these important economic phenomena. Vershofen's definition of a "Consumer's Co-operative Organization" reads like this: <v; sh; 3, 4. I—IV. <v; sv; 3, 3. I—IV. <v; sv; 3, 2. I—IV. <v; sv; 3, 1. —IV.

Vershofen has a good reputation as the very successful secretary of the German Chinaware Cartel; in addition to this position he holds a professorship at the School of Business Administration in Nurnberg: we hope that the second volume dealing with the practical aspects of "Market Associations" provides a better picture of the author's real abilities.

ROBERT M. WEIDENHAMMER

Corporation Finance, Sixth Edition, Volume I. By Edward Sherwood Mead. D. Appleton and Company, New York, 1928. xv, 358 pp.

This edition of Mead's "Corporation Finance," the first edition of which appeared in 1909, is in two volumes. The first of these volumes, to which our consideration is confined, "deals with the normal activities of the corporation, involving the promotion, preparation of the financial plan, and the provision of money." It consists of thirty chapters of varying length. Following a discussion of promotion and the business corporation, approximately a quarter of the book describes the instruments used in raising money. Students who use this book intelligently will, at an early stage of their study, acquire an unusually clear conception of these instruments, which will provide a good foundation for further work in the subject. The next seven chapters deal broadly with various phases of the sale of securities. Then the author gives an adequate description of the determination of profits, in which he discusses maintenance, betterments, and depreciation at some length, and in which, as elsewhere throughout the book, he displays the fact that he has sufficient knowledge of accounting not to abuse its terms and meanings, although the reviewer feels that the "Conventional Forms of Stating Profits" (page 253) will not be regarded as conventional by all accountants. The concluding chapters discuss the management of working capital and the distribution of profits and surplus.

In general the book is well written; arrangement and style are both good. Occasionally the reviewer found a statement with which he could hardly agree. At the bottom of page 257 begins the paragraph which follows: "Another source of surplus consists of profits from premiums on the sale of securities issued by the company. Discounts on all sales of securities are to be considered as losses, and charged against the income of the year. For the same reason, premiums received are to be regarded as profit, although not as profits which can be safely distributed to stockholders." Although the author partially corrects these statements on page 260, it seems to the reviewer that the reader should be told clearly that these discounts and premiums should, theoretically at least, not be allowed to affect the income of the one year alone in which they arise. In the case of bonds, for example, their effect should be spread over a period of years, since amortization (or accumulation, as the case may be) is necessary to produce a correct interest charge over the life of the instrument. On page 277 we find, "By capitalizing an expenditure is meant charging, that is to say, adding its amount to some asset account, with a corresponding addition to some liability item such as surplus, or reserve for additions and betterments." The accountant will ask where the expenditure appeared. Few accountants would wholeheartedly agree probably with the statement (page 297) that, "As long as these secret reserves are kept in the business, no harm is done." The meaning of the sentence, "In this view, the surplus belongs to the stockholders, and the directors, instead of giving them a part of it, give them a stock dividend in cash," page 352, is at least vague. But there are not enough of things of this sort to detract seriously from the merit of the book.

ARTHUR W. HANSON

Corporation Profits. By Laurence H. Sloan. Harper and Brothers, New York, 1929. ix, 365 pp.

In at least two outstanding respects this book has a dual nature; while it is semi-journalistic in character, in the sense that it deals with a limited period—the years 1926 and 1927—so that its specific findings are of relatively ephemeral interest, its basic methods and reasoning processes are of permanent interest and value to all who are concerned with corporation profits, their origins and relationships. The second double appeal of the book is that it is addressed primarily to students of corporation finance, especially as that subject deals with security values and investment; yet it is of keen interest to the accountant, as representing in a large and picturesque way the applications and implications of the data which he has so laboriously put together. "It is about accounting, but is not a book on accounting. It examines the *results* of accounting: takes up the work of the professional accountant where he himself leaves off. . . . ." the author writes on his first page. If any teacher of accounting is looking for support or logical basis for his accounting principles, there are few places where he can find so much of it as here. Not only does the positive significance of the general tenets of accounting appear in the broadest possible light, but the consequences of their disregard are brought out with equal vigor.

The book consists of a study of 550 of the largest business corporations of this country for the two

years named. From the statements for these corporations a composite income statement and a composite balance sheet are prepared to serve as a standard of measurement and a basis for discussion. Then follows a series of chapters in which various features of the income statement are discussed in detail, including a special chapter on Depreciation and Depletion, and giving attention to the conditions in different industries. A number of chapters dealing with the balance sheet in a similar way makes up the rest of the book.

One is tempted to feel in places that the categories are too widely drawn, and the groups too inclusive of diversified cases to support some of the conclusions; but for the most part the author has drawn those conclusions in the same broad terms as his premises, and they are without question valid enough to be of great interest. Chapter V, for example, one of the longest in the book, deals with "The Percentage of Gross Income Saved for Net Income," meaning the percentage of gross income left after all expenses and charges have been deducted. The author himself comments on the wide variety of terms in which "gross income" is reported; twenty different corporations, referred to on pages 70 and 71, use ten different terms, ranging all the way from "Gross Sales" to "Net Profit." This being the base on which the residual net profit is computed as a percentage, one cannot at this point have too much confidence in it. One finds later, however (page 149), that there is a close correspondence between the findings of this chapter and those of Chapter VII, "Earnings on Invested Capital," so much so that the results of the earlier chapter seem to be substantially sound.

The book is full of obiter dicta which will challenge the attention of the accountant, if they do not invite his opposition. "Value, as stated in the balance sheet, is not a matter of fact but one of judgment" (page 26). "It is something of a revelation to learn that, in a bull period, book value bears such a *distant* relationship to market value" (page 87). The inspiration for both these statements is a little table on page 23 comparing the aggregate book values with the market values of the common stock for the corporations studied; in 1926 the stock market values were 137 per cent of the book values, and in 1927, which the book clearly shows to be inferior to 1926 in business profits, stock market values amounted to 169 per cent of book values. The accountant will be tempted to reverse both the statements quoted and to say that stock market values are much more a matter of judgment than balance sheet values, and that it is still more surprising that market values bear to little relation to book values. The whole discussion provides eloquent commentary upon any proposals to depart from cost values for property items in the balance sheet. Another flat statement made is that neither asset values nor earnings have anything like the same influence on security values as "cheap money" (page 39).

Several references are made to the "installment-selling bugaboo," with several implications to the effect that its dangers have been exaggerated. The main basis of this opinion is the relatively small proportion which accounts receivable form of total current assets and of total assets. The book is frank to explain, however, that this results largely from the modern development of unloading receivables on to finance corporations, in dealing with which we are told that the "system as it now operates will not have its test by fire until this country drifts into its next period of general business depression."

Any teacher struggling to bring a body of students through the mazes of depreciation theory and practice will be comforted to read "that the most interesting fact about the depreciation policy of American industry is that there is none"; and the case for full, frank, and honest accounting, of the sort taught in schools but rarely practiced 100 per cent outside, could not be more strongly stated than on page 48: "Concealed assets or overvalued assets, concealed earning power or overstated earning power, do not ordinarily accrue to the benefit of the average stockholder; they accrue to the benefit of those relatively few persons who have knowledge of the concealment. . . . ."

The final chapter, "From an Aëroplane," surveys the entire field of industry and commerce in one broad sweep and concludes that the major cause for the wide disparities among various industrial groups is the overdevelopment of natural resources, and the opportunity thus provided for manufacturers to make an extra profit by the efficient working up of cheap raw materials into manufactured goods in strong demand.

T. H. Sanders

Manufacturing Costs and Accounts. By A. Hamilton Church. McGraw-Hill Book Company, New York, 1929. x, 516 pp.

The revised edition of Manufacturing Costs and Accounts by A. Hamilton Church, follows, in general, the same outline as the first edition. The outline, divided into three parts, covers the General Outline of Manufacturing Accounts, Cost Accounting, and Factory Reports and Returns. The first part considers those business matters and transactions which give rise to the need for Cost Accounting, particularly in a manufacturing concern. The second part, as the title indicates, gives attention to the accounting aspects of the transactions just mentioned. In the last part the very important subject of executive reports is presented. In the reviewer's opinion the last part contains information which is vital to the subject of cost accounting and those studying it, but which is too often neglected or minimized in importance.

The author has made greater use of charts and diagrams in the revised edition than he did in the first volume. Moreover, the revised book contains additional "review chapters," and all chapters now have questions added to them. These changes have improved the book considerably. The chapters on departmentalization have been amplified to advantage. Lastly, two chapters have been added, one on Recent Modification of Costing Methods, and the other on the Use of Diagrams and Charts.

The reviewer considers this book to be one of the most scholarly treatises on the subject and thinks it an admirable text for advanced studies in cost accounting. For beginners it might prove somewhat tedious, although this admittedly is a relative statement, as the goodness of a book depends to a large extent upon the teacher who uses it.

PAUL B. COFFMAN

School Finance and Business Management Problems. By N. L. Engelhardt and Alexander Carter. New York City: Bureau of Publications, Teachers' College, Columbia University, 1928, 526 pp.

This volume, one of a series of problem books on Educational Administration compiled under the leadership of Dr. George D. Strayer of Teachers' College, Columbia University, consists of a series of one hundred thirteen real problems met by superintendents of schools in the field of finance and business management. These problems were gathered over several years by the authors in their contacts with superintendents of schools while conducting surveys of school systems, and other field work, and from superintendents studying under their guidance at Teachers' College.

The chief contribution of the volume, and of the series as well, lies not so much in the value of the problems for class use as in its suggestions as to method for the teaching of educational administration. The teaching of educational administration, it may be noted, has passed through much the same development during the past ten years as has the teaching of business. As the field developed through research, analysis, and a critical evaluation of its problems, it was early discovered that the ordinary textbook and lecture course constituted but a meager preparation for those in training. While the number of fundamental principles is relatively small and while these can be stated in a very brief form, their applications under varying circumstances and in different combinations are, however, almost infinite. Yet the number of applications of these principles which a single instructor might cite is always limited by his own experience and contacts. Moreover, the teaching of principles through lectures amounts to a pouring-in process. The student's training in the analysis and solving of problems that he later needs is almost entirely neglected. Consequently, the use of problems, because of the values suggested above, has recently become an indispensable adjunct in the training of school administrators.

Of the three volumes in the series already published, the present one, *School Finance and Business Management Problems,* seems to be the most usable. In scope it covers the field in the conventional way. Many of the problems are so skillfully set up that they command a high degree of interest and present a single definite problem for consideration. Some, however, are highly artificial and are evidently intended to send the student to literature on the topic treated rather than to challenge him to think through a problem with the facts before him. In some cases the questions at the end of the problem—there are always several—can be answered without reference to the problem at all; they often stress the acquisition of facts rather than the making of a judgment which, the present writer feels, is the chief contribution which the problem can make in the professional training of school executives.

Since the volume is the first of its kind to be published in the field of public school business administration, it is not derogatory to say that it perhaps lacks something of balance and that the problems are not equally good from the teacher's standpoint. It is noteworthy, however, in that it organizes materials in a new way and in a relatively new field. Though future volumes of a similar nature may be better, they will be so largely through the experience which this original treatment of public school business problems has provided.

L. LELAND DUDLEY

The Standard Book on Cost Finding for Printers. Edited by Elmer J. Koch. United Typothetæ of America, 1928, Chicago. 127 pp.

The development of sound cost finding methods for the printing industry by the United Typothetæ of America is as good an example as may be had of the possibilities of intelligent and associative effort. In 1909 the Association first promulgated its "Standard Cost Finding System for Printers." In 1920 the Association's Committee on Education presented a complete revision of that system, bringing it up to date and including the development in practices up to that time. The present issue (1928), designed to meet new conditions, is offered by the Committee on Education, having been edited by Mr. Elmer J. Koch, Executive Secretary of the Graphic Arts Club of Cleveland, Ohio. It is refreshing to note that the issue does not purport to be the final word on the subject, and that on the contrary it is issued with a recognition of the further necessity of continued promotional activity.

The book is to serve, according to its foreword,

as a reference book for office use, as a suitable medium for home study, and as a text in printing schools and in classes organized by local Typothetæ Associations. Beginning with a short statement of the basic principles involved, the book presents the balance sheet, the profit and loss statement, and summary of departmental costs (showing cost per chargeable hour), as the goal toward which the system aims. It then takes up questions involved in the distribution of the various expenses; outlines the accounting procedures and forms required in connection with labor, materials, manufacturing orders, and sales; and concludes with a discussion of the reconciliation between the cost figures and the trading profit, as shown by the profit and loss statement, the method of operating the system, and the development of ratios. The entire procedure is so outlined that the printer may operate with the cost system interlocked with the General Accounts or separate and apart from the General Accounts.

A single complete illustrative problem with figures and forms runs throughout the entire book, and each chapter concludes with questions designed for use in teaching or studying the subject. Laying aside one's particular prejudices on mooted points of cost accounting, it can be stated that the book presents a full and complete discussion of the subject, adequately illustrated by concrete example, and admirably designed for the purposes for which it was intended. From the pedagogical standpoint it is open to one criticism, in that it does not present through the medium of Journal entries the complete picture of the accounting entries. As a result, the teacher would have some difficulty. For instance, in the profit and loss statement on page 28, insurance expense of $28 is divided into insurance chargeable to the factory of $26.35, commercial expense $1.46, and selling expense $0.19. On the summary of department costs, opposite page 32, it is apparent, after some study, that the $28 has been apportioned on a different basis. The initial distribution is as follows:

General Administrative	$ 1.46
Selling	.19
Stock Storage and Handling	2.73
Packing, Shipping, and Delivery	.98
Factory Departments	22.64
Total	$28.00

The distribution of some of the above items results in a final classification somewhat at variance with the profit and loss statement. For educational purposes, it would have been better to present the apportionment as made on the books through the medium of Journal entries.

Without going further into the details of the matter, however, it is sufficient to say that the publication is up to the high standard of the Association's previous efforts, and an examination of its contents indicates that the future development of cost accounting in that industry may be safely left in the hands of the Association.

James L. Dohr

A Scientific Approach to Investment Management. By Dwight C. Rose. Harper and Brothers, New York, 1928. vii, 439 pp.

This book opens with parables, and with quotations from H. G. Wells, to establish the proposition that bonds are no longer to be the investor's mainstay, but that common stocks are the thing. The bond game was one in which the financiers and insiders took the big profits; bond interest was the crumbs which fell from the rich man's tables; now the mass of investors are wide awake and are going to share in the good things, via common stocks.

This is one of those glamorous ideas which have just enough truth in them to be dangerous, both theoretically and practically. In spite of all the hindsight which may now be brought to bear, it may be doubted whether twenty-five years ago a selection of common stocks was a proper recommendation to make to widows and orphans. Just about that long ago the present reviewer was sitting at the feet of a distinguished and perspicacious economist who remarked, among other things, that "the common stocks of American corporations represent mostly hope." If it be true that our generation is the first to discover the values in common stocks, it is equally true that this is the first generation of common stocks that ever deserved any such values. What needs to be guarded against now is that the market values of common stocks should become as disproportionate to the earnings on which they are supposed to be based, as the book values formerly were to the asset values.

It is not intended by this to controvert the main ideas of the book, but rather to introduce a caution against too sweeping interpretations of the past, and too literal applications of them to the future. The materials here presented will be of value and service to the increasing numbers who know how to use them. There is a certain amount of technical phraseology which the lay reader will have to work on; the profits above safe interest returns from investments, and an assumed minimum requirement for underwriting, are called respectively "investment accomplishment" and "underwriting accomplishment"; but the application of these to specific fire insurance companies is illuminating, and so is the body of past experience, both general and specific. From this a fundamental investment policy is developed which is calculated to provide not only for the conservation of the capital in dollars, but in purchasing power also. Appendix II—Forecasts by Prominent Financiers in 1899—is most interesting historically; a brief statistical

summary at the end would make it still more effective. The statistical matter in the other appendices is far more available when presented in the form of graphs than in the form of figures; the latter are somewhat difficult to decipher. The data on pages 370-398 especially, covering the prices of and returns from individual Dow-Jones stocks and bonds from 1901 to 1927, are somewhat heavy reading except for the most diligent.

(The above review was written before the stock market crisis of October and November.)

T. H. SANDERS

Commercial Law by Cases. Cowan, Shea, and Morin. Henry Holt and Company, New York, 1928. vi, 390 pp.

Within the present century it has come to be usual for courses in business law to be offered in institutions of high school grade. One of the earliest, and perhaps still the best, of the manuals intended for these courses was that prepared by the late Dean Huffcutt of Cornell. This is a text which a high school teacher, having no particular legal training or experience, could use at least with safety. A more learned and ambitious teacher might seek to give a course in general jurisprudence, defining law, indicating its sources, treating of the administration of law, and dealing broadly with such legal concepts as custom, precedent, ownership, possession, personality, obligations, and the like. For this teacher such books as Gray's *Nature and Sources of the Law*, and the English treatises in jurisprudence, are invaluable. To the reviewer it has long seemed that our legal literature was sadly lacking in an elementary text along such lines as these which should be at once authoritative and intelligible. Take such an important concept as purchase for value without notice. There is, in the present volume, an obscure allusion to it (162), but no concise, clear, or accurate statement of its elements. What teacher or student, reading the extraordinary assertion (5, 6) that the Law Merchant is the "early development" of "rules to prevent cheating" that have "grown up around the conduct of business" would recognize it as the Law Merchant supposedly familiar to lawyers and frequently referred to by courts of law?[1]

The present manual purports to be "a secondary school law text developed by the case method" (v), dealing with contracts, sales, agency, negotiable instruments, bailments, insurance, partnerships, corporations, and real property. There are some good simple forms (10, 148, 178, 299) and numerous "questions and cases" and "case problems" at the end of each chapter. "Most of the cases" are said to be "actual" (vi). Unfortunately, the citations are usually omitted. This seriously detracts from their authoritativeness. Students are naturally skeptical as to the accuracy of statements of law—particularly where the instructor is not a lawyer by profession—and it is most important that they be persuaded of the dependability of what is said to them. For example, it is reported that information has been given by the police that the owner of stolen property cannot regain it from a bona fide pledgee without paying the amount for which it stands as security. As between the mere *ipse dixit* of a police sergeant and that of an instructor the student may not be sure which is right. But let the instructor send the student to a decided case[2],[3] and he will not hesitate in coming to the conclusion that the police information was wrong. Furthermore, in cases of conflict of authority no one could tell the result reached in a case unless he knew in what court it was decided. Moreover, either teacher or student might well desire to know whether he is reading a statement of law by the court or one by the authors. Conceivably, it might greatly affect the degree to which he would care to rely upon it. Again, some of the citations given are manifestly wrong. Thus, Utterstrom v. Kidder, Inc. (21) should be 124 Me. 10. Gribben v. Maxwell (25) should be 34 Kansas 8. This suggests something worse than misfortune in seeing the book through the press, which might possibly account for the omission of the year from all the dates in the instruments on 223, 224, 225, 229, 230, 231, and 232, and "tortuous bailment" (266).

The elements of contract (8) are said to be "parties, subject matter, consideration and agreement." In the first place, this is a very peculiar order in which to state them here and to take them up later. No reason is given for departure from the usual order with "agreement" as the first essential of contract. Next, the terms used are misleading. "Subject matter" apparently refers to legality (27) and impossibility (43). "Parties" is commonly employed, not, as here, in reference to capacity, but with reference to original parties (one or many) as distinguished from parties by assignment. Moreover, it is somewhat startling to find in the text or index, in whose preparation a member of the Massachusetts Bar participated, no reference to coverture as creating a legal disability.[4] How can the statement (17), "the incompetent's contracts except for necessaries are voidable," be reconciled with such familiar decisions as Elliott v. Horne[5] and Breed v. Judd[6]? Why the discussion (23) of the importance of knowing whether or not the other party is insane when such knowledge is, for most purposes, im-

[1] Goodwin v. Roberts L.R. 10 Ex. 337.

[2] Amols v. Bernstein 214 App. Div. (N.Y.) 469.

[3] Boston Supply Co. v. Rubin 214 Mass. 217.

[4] Lord v. Parker 3 All. 127.

[5] 10 Ala. 348.

[6] 1 Gray 457.

material?[7] What is the authority for the statement (24) that the inebriate's or idiot's contracts are not merely voidable but void?[8] The marriage brokerage case (80) seems to be directly in conflict with Herman v. Charlesworth.[9] If, in the case at the bottom of 41, the words "expresses his satisfaction" mean "signs a memorandum to satisfy the Statute of Frauds," the risk of loss thereafter is on the buyer, in England, and in most states, though not in Massachusetts.[10] In the chapter on "consideration," in place of a definition of consideration as either a legal benefit to the promisor or a legal detriment to the promisee, we find vague and unsatisfactory references (49, 50) to consideration as that which "has a money value" or is "the surrender of a legal right." It is not apparent how either teacher or pupils could form any definite or reliable notion of consideration from such treatment of this difficult subject matter. The situation is not helped by the introduction of a promissory note (51) which appears to be non-negotiable since it is not payable to the order of "Harry," and which, even if negotiable, would be unenforceable in the hands of the third party unless the latter not merely gave "some consideration" but fulfilled also the other requisites of a holder in due course. The paragraph (53) to the effect that in Massachusetts "the seal is simply evidence of a consideration" but the courts readily set aside contracts not supported by "actual consideration" seems hard to reconcile with the following: "The covenant being under seal the consideration cannot be inquired into. . . . . A seal imports consideration, or in other words, the existence of a consideration is conclusively presumed from the nature of the contract."[12] There is no allusion to perhaps the most important classification of contracts—bilateral and unilateral. The elements necessary to create estoppel are not dealt with in the text (60, 61) in such a way as to show clearly their scope or content. The intimation (69) that a peddler's placard or a dealer's possession of stock is a legally binding offer is amazing in view of such familiar decisions as Moulton v. Kershaw[13] and Ashcroft v. Butterworth.[14] Each of the statements in these cases was held to be an "advertisement" and not an offer. Little assistance in distinguishing between the two is afforded by the words (70) "an advertisement is not an offer unless it is apparently meant to be." The language in Brauer v. Shaw,[15] wherein the court said that the jury could have found that the plaintiffs had "done all that was necessary on their part to complete the contract" in handing their acceptance to the telegraph company, seems contrary to that of the text (81): "In Massachusetts . . . . an acceptance . . . . is effective only when received."[16],[17] How many students will leave Chapter XI (93) with the correct impression that while part performance is one way in which the seventeenth section of the Statute of Frauds may be satisfied (Uniform Sales Act, Section 4), it does not satisfy the fourth section of that statute?[18] How many teachers will know that there are two possibilities of relief where a contract within the fourth section is not evidenced by the required memorandum?[19],[20] How can either teacher or student learn from this text the six acts of bankruptcy (129)? The first case on 149 leads to the conclusion that "the title to goods in a cash sales does not pass before the cash is paid" which in its application to the facts under review is flatly contrary to the common law[21] and to the express language of the Uniform Sales Act (Section 19). The second case on 150 is not a "conditional sale" at all; it is a "sale on trial." The text does not state the three cases[22] in which the unpaid seller has a lien (159, 184). It would be interesting, and to the reviewer surprising, to find decisions in reputable jurisdictions wherein equity granted "specific performance" of a contract "for special services" (164) by an artist or a musician. The authors do not state when there is an implied warranty of fitness for a particular purpose (172), or an "implied warranty of good quality" (173). Has any common law court ever decided that if an agent "is to make a written contract his appointment must be written?"[23] The result in the case on 184 is inconsistent with the reasoning in Auringer v. Cochrane,[24] probably by reason of confusing authority by estoppel with authority by necessity. What kind of authority is "Lenox" supposed to have in the case on 206? He has been given no actual authority, express or implied. It does not appear that "Packard" knows of the "printed contract" or that it was carried by "Lenox," hence there could be no authority by estoppel. The obvious answer is that "Lenox" has no authority of any kind to bind "Packard." The text near the bottom of 212 is inconsistent

[7] Seaver v. Phelps 11 Pick. 304.
[8] Green v. Gunsten 154 Wis. 69.
[9] 1905 2 K.B. 123.
[10] Paine v. Meller 6 Ves. 349.
[11] Libman v. Levenson 236 Mass. 221.
[12] Mather v. Corliss 103 Mass. 568.
[13] 59 Wis. 316.
[14] 136 Mass. 511.
[15] 168 Mass. 198.
[16] Worcester Bank v. Wells 8 Metc. 107.
[17] Lewis v. Browning 130 Mass. 173.
[18] Morse v. Winslow 254 Mass. 407.
[19] Quasi contract (Cromwell v. Norton 193 Mass. 291).
[20] Estoppel to assert the statute (Potter v. Jacobs 111 Mass. 252).
[21] Higgins v. Murray 73 N.Y. 252.
[22] Uniform Sales Act, Section 54.
[23] Johnson v. Dodge 17 Ill. 433.
[24] 255 Mass. 272.

with Des Rivieres v. Sullivan,[25] and near the middle of 216 with Drew v. Nunn.[26]

The language of 228 and 238 wrongly intimates that words of negotiability are necessary in an indorsement, and the description of a holder in due course on 229 is almost ludicrously at variance with the statute,[27] omitting the requirements that the instrument must be complete and regular upon its face and that it must be transferred to one who has no knowledge of any infirmity in the instrument or defect in the title of the person negotiating it, and adding the requirement that it must have been transferred "in the ordinary course of business."

[25] 247 Mass. 443.
[26] 4 Q.B. 661.
[27] Section 52.

The reviewer pleads ignorance of what is meant by "time sight" (232). Contrary to the implications of the text (321), an infant partner cannot, to the detriment of firm creditors, withdraw his contribution to capital.[28]

From the foregoing, it is manifest that the reviewer strongly disapproves of the form and of the substance of this book. He leaves it with the suggestion that the procedure, described on page vi, be reversed. Let the "technical book," even if intended for secondary schools, be written by "a specialist in that technical subject." Thereafter, if necessary, let it be "combed" by persons familiar with language or with the problems of teaching in the secondary schools.

Hugh W. Babb

[28] Page v. Morse 128 Mass. 99.

UNIVERSITY NOTES

BAYLOR UNIVERSITY

Professor M. S. Carroll of the accounting department will be working toward his Ph.D. at Chicago University this summer and the accounting courses will be conducted in his absence by Mr. Dunker Hudson, cashier of the University.

Professor A. S. Lang is on leave this year studying at the University of Texas. He will return to the department in September.

The auditing seminar is being conducted as a field course in auditing. Only students who have a high ranking and who have had seven or eight majors in accounting are admitted to the course. They are given work with a firm of certified public accountants and submit reports for which they receive a major credit. The course is proving highly satisfactory.

DENVER UNIVERSITY

Professor Clem W. Collins announces a new book on "Appraisals of Land Improvements and Personal Property" by Prouty, Collins, and Prouty, which will soon appear from the McGraw-Hill Press. Mr. W. L. Prouty is an instructor in the court in Real Estate Appraisals and a member of the National Appraisal Company.

The American Society of Certified Public Accountants will meet in Denver in September of this year while the American Institute of Accountants will convene at Colorado Springs in the same month. Mr. Collins is chairman of the meetings committee of the Institute.

Mr. A. J. Lindsay of this department is chairman of the educational committee of the Colorado Society of Certified Public Accountants. Recently this committee assisted the School of Commerce in developing a new course in engineering for business executives. The course is being offered for the first time this semester under the direction of Mr. Frank Shepard, director of the U. S. mint.

FRESNO STATE COLLEGE

Mr. Victor E. Storli, M.B.A., Assistant Professor of Commerce at Fresno State College, received an Oregon C. P. A. certificate in November 1929, having passed the American Institute examination in May 1928. Mr. Storli is in charge of accounting instruction at Fresno State College. The commerce department is growing rapidly, there being this year a fifty per cent increase in enrollment over 1928-29.

UNIVERSITY OF GEORGIA

Mr. Lloyd B. Raisty is on leave of absence for the year, studying at the University of Texas.

Mr. M. S. Cooley, M.S., University of Georgia, C.P.A., is serving as instructor in accounting.

UNIVERSITY OF ILLINOIS

Professor Lloyd Morey has been on leave of absence for the first semester. He spent several months in Europe studying university business procedures there and gathering material for his book on University and College Accounting, which he has just completed.

Mr. M. E. Hall is a new assistant in accounting.

The *Enterpriser*, the student publication of the School of Commerce, recently issued a special accounting number. One article showed that a larger percentage of accounting majors graduate with honors than any other group.

Dr. Harry W. Chase of the University of North Carolina has recently been elected president of the University of Illinois. Mr. Chase will be the first president in 25 years who has not been a director of commerce courses. President James was the organizer and first director of the Wharton School at the University of Pennsylvania. President Kinley was director of the courses in commerce from 1902-1916.

UNIVERSITY OF NEBRASKA

Professor O. R. Martin has been elected to membership in the American Institute of Accountants.

OHIO STATE UNIVERSITY

Professor H. C. Greer, who has been on leave of absence for the past two years, has resigned his position in the department and will continue his work as Director of Accounting with the Institute of American Meat Packers at Chicago. He will also hold a re-

search professorship in accounting at the University of Chicago.

Mr. D. M. Shonting is this year on leave of absence doing special work in the department of accounting and finance of the state of Ohio. Mr. R. N. Frickey, formerly with Beaman Thomas and Co., Accountants and Engineers, will serve as instructor in the absence of Mr. Shonting.

Mr. J. B. Heckert has been appointed acting chairman of the department upon the resignation of Mr. Greer. Mr. Wm. E. Dickenson and Mr. J. W. Jones have been appointed assistant professors of accounting. Mr. Heckert is chairman of the controller's division of the Steel Manufacturers of Northeastern Ohio and has also been instrumental in organizing the auditors' division of the Ohio Hotels Association. This association plans to meet once each quarter on the university campus.

The Columbus chapter of the N.A.C.A. is this year giving a trophy cup to the local chapter of Beta Alpha Psi, which will be presented at a joint meeting in the spring.

Mr. J. B. Taylor and Mr. H. C. Miller have just completed a book on C.P.A. Problems, published by McGraw-Hill.

UNIVERSITY OF PENNSYLVANIA

Mr. Thomas A. Budd, for a number of years assistant professor of accounting in Wharton School is now associate professor of Finance and chairman of the Department of Finance.

WASHINGTON UNIVERSITY (ST. LOUIS)

Professor William S. Krebs has been officially appointed consulting accountant to the City of St. Louis. His first duties are to represent the city before the Missouri Public Service Commission in the street car depreciation and rate case.

CONVENTION REPORT

American Association of University Instructors in Accounting; Proceedings of the Fourteenth Annual Convention, Washington, D.C., December 27-28, 1929

PROGRAM sessions of the Fourteenth Annual Convention were held in the Hotel Raleigh on the morning and afternoon of Friday and Saturday, December 27 and 28, 1929. Sessions were presided over by President Himmelblau. The program consisted of round table discussions on various subects as follows:

FRIDAY, DECEMBER 27, MORNING SESSION

Round Table on Accounting Theory.

Topic: Appreciation.

Chairman, John R. Wildman, Haskins & Sells.

Papers by Messrs. C. C. Carpenter, Marshall College; E. R. Dillavou, University of Illinois; C. A. Fryxell, Augustana College; Andrew Barr, Jr., Yale University; L. O. Foster, Western Reserve University; A. C. Littleton, University of Illinois.

An informal talk was also given by Professor Irving Fisher of Yale University.

FRIDAY, DECEMBER 27, AFTERNOON SESSION

Round Table on Accounting Instruction in Commerce Schools.

Chairman, H. T. Scovill, University of Illinois.

Papers by: Messrs. G. A. MacFarland, University of Pennsylvania; H. A. Heckman, University of Georgia; H. W. Gray, University of Florida; J. H. Dohr, Columbia, University; R. S. Willcox, Ohio State University; C. F. Schlatter, University of Illinois; L. C. Anndon, New York University; E. J. Filbey, University of Illinois; J. V. Toner, Boston University; David Himmelblau, Northwestern University; W. J. Goggin, Boston University; A. H. Rosenkampff, New York University; J. B. Taylor, Ohio State University; W. J. Graham, University of Chicago; J. B. Heckert, Ohio State University; A. H. Rosenkampff, New York University.

SATURDAY, DECEMBER 28, MORNING SESSION

Round Table on Accounting Theory.

Topic: The conflict between the "periodical allowance for depreciation" and the "periodical allowance in anticipation of retirement" concepts, in its relation to the current handling of depreciation and the problem of public utility valuation.

Chairman, James P. Adams, Brown University.

Papers by Messrs. Perry Mason, University of Michigan; John Bower of the American Public Utilities Bureau; James C. Bonbright, Columbia University.

SATURDAY, DECEMBER 28, AFTERNOON SESSION

Round Table The Place of Accounting in Non-Commerce Schools.

Papers by Messrs. James C. Campbell, Knox College; L. L. Shaulis, Tufts College; John Hanslein, University of New Hampshire; Stanley Howard, Princeton University; R. A. Stevenson, University of Minnesota; J. H. Dohr, Columbia University; W. J. Graham, University of Chicago; W. E. Cox, University of Washington; Arthur W. Hanson, Harvard University; David Himmelblau, Northwestern University.

There was also a paper on University Accounting by Ira N. Frisbee of the University of California at Los Angeles, and a paper on Cost Analysis for Hospitals by C. Rufus Rorem of the Committee on the Cost of Medical Care.

Each program session was followed by active discussion in which numerous members participated.

The annual dinner of the Association was held on Friday, December 27, at 7:00 P.M. At the close of the dinner, the Beta Alpha Psi award for 1929 was presented to Messrs. John R. Wildman and Weldon Powell for their book "Capital Stock of No Par Value". The announcement of the award was received enthusiastically by those in attendance, and Messrs. Wildman and Powell each responded in a brief speech.

President Himmelblau then called for the reports of committees which were presented and acted upon in order. Recommendations from the Executive Committee covering:

(1) Appropriation of $325.00 each to the

Editor and Secretary-Treasurer for services during 1929;

(2) Opening the advertising columns of THE ACCOUNTING REVIEW to all types of advertising subject to the discretion of the Editor and Secretary-Treasurer;

(3) Extension of special subscription rates of $2.00 per year to junior employees of public accountants and $1.00 per year to undergraduate students were discussed and approved. In connection with the special subscription rates, Mr. Powell recommended that the new plan be adopted as an experiment and made subject to withdrawal if it does not work out satisfactorily. The motion was adopted with this understanding.

Mr. Greer then read the report of the Secretary-Treasurer and this was approved.

Mr. Lay then presented the report of the Constitution Committee containing a discussion of various proposals which have been before the Committee during the year. He then moved amendments to Article IV and Article VIII and the adoption of a By-Law covering the amount of dues. After some discussion, these proposals were unanimously adopted . (The Constitution in its amended form appears elsewhere in this issue.)

Brief reports were then presented by Mr. Kohler for the Publications Committee, Mr. Hanson for the Book Review Section of THE ACCOUNTING REVIEW, Mr. Wildman for the Research Committee, Mr. Heckert for the Committee on Co-operation with the American Institute of Accountants, and Mr. Rosenkampff for the Committee on Co-operation in the International Congress on Accounting. Typewritten copies of reports by other Committee Chairmen who were absent were also presented and ordered printed in the proceedings.

Mr. Hornberger then reported for the Auditing Committee and said that the books of the Secretary-Treasurer had been found in good condition and that the statements correctly set forth the results of operations during the year and financial position at its close.

There being no further formal program, the meeting was thrown over to a general discussion of Association problems and Mr. Filbey urged that a special effort be made to obtain subscriptions to THE ACCOUNTING REVIEW on the part of all college libraries and Mr. Greer discussed the desirability of establishing a clearing house for reproducing and distributing among the membership original problems developed in any school which would be useful to other institutions. The President stated that he had no formal address to present and the meeting then adjourned.

A second business session of the Association was held on Saturday, December 28, at 4:00 P.M. Mr. Stevenson presented a report for the Committee on Resolutions expressing the appreciation of the membership to officers, committee members, program chairmen, and speakers, the Editor and contributors to THE ACCOUNTING REVIEW, the committee on local arrangements, and to accountants not actively engaged in teaching work who have given substantial amounts of time to further the progress of the Association. These resolutions were all unanimously adopted.

The President read a communication from the American Society of Certified Public Accountants relative to its report on the classification of accountancy services and directed the Secretary to acknowledge its receipt.

After brief comment on the progress of the Association during the year, the President then called for a report of the Committee on Nominations. This report was presented by Mr. Newlove and placed in nomination the following:

For President, A. H. Rosenkampff, New York University.

For Vice-President, Howard C. Greer, The University of Chicago.

For Secretary-Treasurer, Charles F. Schlatter, University of Illinois.

In presenting his report, Mr. Newlove pointed out that the terms of Messrs. Stevenson and Adams as Vice-Presidents and of Mr. Kohler as Editor of THE ACCOUNTING REVIEW continue beyond the present year.

Following the report, it was moved that the nominations be closed and a white ballot cast for the nominees selected and this motion was unanimously adopted. Mr. Rosenkampff then took the chair and thanked the members for the honor conferred upon him, promising his best efforts to promote the work of the Association during the forthcoming year.

Mr. Stevenson then asked for recognition and stated that the Committee on Resolutions had not been aware of the impending retirement of Mr. Greer as Secretary-Treasurer, but that he felt certain it was the sense of the Committee that a vote of thanks be extended to Mr. Greer for his service in this office during the past four years. He, therefore, offered a resolution to that effect and it was adopted.

After some further brief discussion of Association problems, the meeting adjourned.

REPORT OF THE SECRETARY-TREASURER

The financial record of this association is one of continued growth and stability. For many years the Secretary-Treasurer has been able to report at each convention a "bigger and better" record for the organization. The year just closed is, happily, no exception to the rule. The association has experienced a moderate increase in net income and in net worth, and has closed the year in a sound and generally satisfactory financial position.

There has been a continued growth in membership during the year, though the increase is more moderate than in 1928. Additions to the membership roll number 72, while resignations and drops total 55. The net increase of 17 members brings the total enrollment to 633. There are in the Secretary's hands, 15 additional memberships to become effective January 1, 1930.

With the increase in membership, there has also been an increase in dues assessed, the total being $2,764.00 against $2,724.00 for 1928. Collections on dues, however, have been somewhat less successful than last year and as a result it has been necessary to write off bad debts amounting to $509.00 and to add $150.00 to the reserve for uncollectable accounts still on the books. The unsatisfactory situation here indicated is referred to further in a later paragraph of this report.

While the net revenue from dues has thus fallen off slightly, the other revenues of the association have increased in gratifying fashion. Subscriptions and single copy sales of the ACCOUNTING REVIEW were $799.50 in 1929 against $684.50 in 1928. Advertising revenue was $320.00 this year against $210.00 last year. Total revenues, therefore, were $3,906.61 gross in 1929 against $3,640.94 in 1928. After deduction of bad debts and bad debt reserves, 1929 shows revenues of $3,216.36 against $3,042.94 for 1928.

Expenses for the year also increased somewhat over the preceding period, although the change was moderate considering the added costs occasioned by new magazine publishing arrangements and the large number of extra copies of the magazine provided for membership solicitation. The total magazine costs, including extra copies, new address lists, and cost of changing to the new size, were $1,865.41 against $1,770.92 last year. General office expenses were slightly less than in 1928, but convention expenses were substantially larger, due to employment of a convention reporter for one session, use of badges, additional registration and program expense, etc. Total expense, exclusive of bad debts, was $2,378.99 this year against $2,267.34 in 1928.

As may be calculated from the foregoing, net income, before compensation to Editor and Secretary, was $837.37 in 1929 as compared with $775.60. This increase is a nominal one, but, as the business statisticians are wont to remind us, 1928 itself was a phenomenal year and any increase over its results should be judged accordingly. The magazine has done well and fully paid its way; the members have done not quite so well, either in paying their own dues or obtaining fellow-members who will do so. Perhaps the Secretary-Treasurer's eloquence on the subject has become somewhat too familiar to provide the stimulus necessary to cause a college professor to part with four dollars.

Net worth of the association on December 24 was $1,818.30, or $237.37 more than on the same date last year. The increase is the difference between the amount of net income in 1929 and the $600.00 compensation voted to the Editor and Secretary at the convention last year. Since the books were closed, the Executive Committee has shown that the Christmas spirit is not yet dead by again appropriating the bulk of the year's net income to these same needy individuals. The compensation voted for 1929 is $650.00 and net worth after the appropriation is reduced to $187.37. Cash in the bank totals

$1,696.30, accounts receivable are carried at $344.50, and our sole piece of fixed property is still valued at $12.00. Subscription payments received in advance are carried as unearned income and amount to $234.50.

A comparison of results for the four years since the association began publication of a quarterly magazine may be of interest, and copies of a comparative statement have accordingly been prepared for your perusal at this time. Prior to 1926 the association received and disbursed not much over $1,000 each year; income and expense have roughly trebled since that time. The substantial income from magazine subscriptions and advertising has become a noteworthy factor. Cash on hand has increased steadily, and net worth, which was impaired somewhat in 1926 and 1927 through payment of compensation to officers, is now above the amount with which the association started on its new program at the end of 1925.

Your Secretary-Treasurer has been greatly disturbed at the large amount of uncollectable dues which require to be written off each year. It is recommended that members who are delinquent in dues be dropped from membership at the end of the second year's delinquency instead of the third, as has been the custom in the past.

The effect of this change will be to reduce the amount of dues assessed and also the amounts charged off. Experience indicates that the amounts collected from members over two years in arrears are negligible.

Accounting and clerical work of the association has continued during 1929 in the capable and willing hands of Miss Josephine Lowrie of the accounting staff at Ohio State University. For her successful management of affairs in the writer's continued—now presumably permanent—absence from Columbus, appreciation has been expressed in previous annual reports. The association remains in her debt for such competence as has been displayed by this office, as does the writer also.

Respectfully submitted,
HOWARD C. GREER, *Secretary-Treasurer*

REPORT OF THE EXECUTIVE COMMITTEE

The Executive Committee met at luncheon on Friday, December 27, 1929, those present being Messrs. Himmelblau, Rosenkampff, Stevenson, Greer, Kohler, Filbey and (by invitation) Wildman. The Committee engaged in a general discussion of Association policies which resulted in the recommendation that the membership be asked to approve the following changes in policy with regard to THE ACCOUNTING REVIEW:

(1) That advertisements for insertion in THE ACCOUNTING REVIEW be solicited from other than book publishers, and that all types of advertising be admitted to the pages of the magazine subject to the discretion of the Editor and Secretary-Treasurer;

(2) That special subscription rates to THE ACCOUNTING REVIEW be established for the following classes and individuals:

(a) junior employees of public accounting firms, $2.00 per year;

(b) undergraduate students in colleges and universities, $1.00 per year.

The Committee voted further that compensation amounting to $325 each be paid to the Editor and to the Secretary-Treasurer for their services during 1929. After reviewing the financial statement for 1929, it was further voted that a tentative budget of $2,000 be established for the expense of issuing THE ACCOUNTING REVIEW during 1930 with the understanding that this budget might be increased to the extent of any increased revenues from advertising and subscriptions.

CONSTITUTION

THE AMERICAN ASSOCIATION OF UNIVERSITY INSTRUCTORS IN ACCOUNTING

ARTICLE I

The name of this organization shall be The American Association of UNIVERSITY INSTRUCTORS IN ACCOUNTING: short title "UNIVERSITY INSTRUCTORS IN ACCOUNTING."

ARTICLE II

The objects of the Association shall be as follows:

(a) To further the advancement of education in accounting, particularly the development and refinement of the theory of accounting, content of accounting courses, and methods of instruction.

(b) To encourage practical research in accounting, especially theory and methods, the

interpretation of accounting data, and the use of accounting statistics in related fields.

(c) To develop media for the discussion of accounting subjects.

(d) To promote more intimate and cordial relations among instructors and others who are interested in the development of accounting.

ARTICLE III

There shall be two classes of members active and associate. Active membership shall be limited to those engaged in giving instruction in accounting in educational institutions of collegiate rank. Other persons interested in instruction in accounting may become associate members. Any active member who permanently discontinues his teaching work as aforesaid thereby shall become an associate member. Any associate member who undertakes teaching work as aforesaid shall thereby become an active member

Nominations for membership may be made to the Secretary-Treasurer by any member. Election to membership shall be accomplished in such manner as the Executive Committee shall direct.

ARTICLE IV

By-laws not in conflict with this constitution may be enacted or amended at any annual meeting on motion by or through the Committee on Constitution and By-Laws, by a two-thirds vote of the members present and voting.

ARTICLE V

There shall be an annual meeting of the Association at such time and place as the Executive Committee shall direct. There shall be such meetings of the Executive Committee as may be called by the President.

ARTICLE VI

The administration of the affairs of the Association as provided by the Constitution and subsequent legislation shall be vested in an Executive Committee, consisting of the officers, who shall be a president, three vice-presidents, and a secretary-treasurer; three ex-presidents representing the three next preceding administrations; and the editor of THE ACCOUNTING REVIEW. The vice-presidents first elected shall hold office for terms of one, two, and three years, respectively. Vice-presidents thereafter elected, and the editor of THE ACCOUNTING REVIEW, shall hold office for three years. The president and secretary-treasurer shall be elected annually. The above provision for officers shall be deemed to cover the requirements in the certificate of incorporation as to trustees.

ARTICLE VII

Voting power in the Association and eligibility for office shall be restricted to the active members.

ARTICLE VIII

There shall be standing committees on constitution and by-laws, publications, and membership, and such other standing committees as shall be determined by the Executive Committee. Subsequent appointments shall be for a period of three years. All committee members shall be appointed by the President. The president shall be an *ex-officio* member of all committees.

ARTICLE IX

This constitution may be amended by a two-thirds vote of the members present and voting at any annual meeting, subsequent to confirmation by a majority of those voting through a referendum mail vote. Proposed amendments must be submitted by or through the Committee on Constitution and By-laws, and a written statement of any proposed amendment shall be mailed by the Secretary-Treasurer to each member at least thirty days prior to the date of the annual meeting.

BY-LAW I

Annual membership dues shall be determined by the Executive Committee and shall not exceed $5.00. Annual dues shall become payable at the beginning of each calendar year.

Any member who becomes two years in arrears, and who does not remit within thirty days after formal notification of the provisions of this article, shall be dropped from the roll by the Secretary-Treasurer, and may thereafter be reinstated only by action of the Executive Committee and payment of arrears in full.